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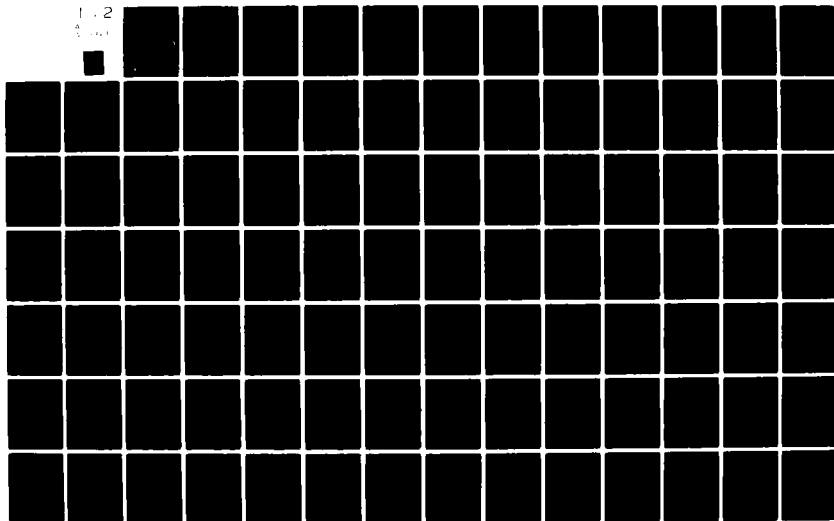
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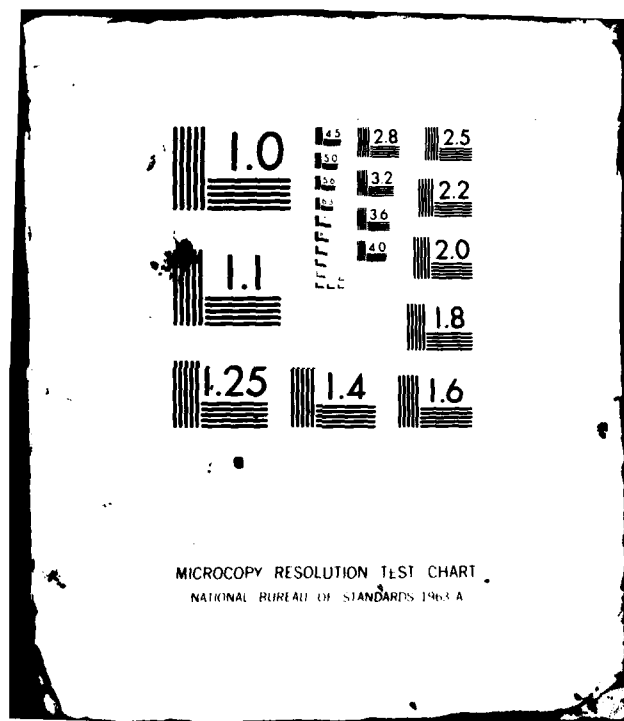
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Report Number 1

APPLICATION OF A COMPUTERIZED GENERAL PURPOSE  
INFORMATION MANAGEMENT SYSTEM (SELGEM) TO MEDICALLY  
IMPORTANT ARTHROPODS (DIPTERA: CULICIDAE)

Annual Report

Terry L. Erwin

June 1980

For the period 1 September 1979 to 30 May 1980

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Smithsonian Institution

Washington, DC 20560

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
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)  The Mosquito Information Management Project was initiated in 1979 for the purpose of developing a computer-based systematic and ecological master file (data bank) of the National Museum Mosquito Collection housed in the Smithsonian Institution. The approximately 500,000 specimens with associated data constitute the best mosquito collection in the world. The data management system SELGEM (SELf-GEnerating Master) was adapted to meet the needs of the project.		

A new mosquito collection information format has been developed, and programmed for ENTREX (data input hardware-software system) and the Honeywell 6620 computer. ENTREX indices were created for collectors, depositories and countries to permit use of abbreviations in collection records. Five subprograms were written to test the capability of SELGEM in addressing specialized questions to ensure its competence in handling hierarchically arranged data. The computer program, MILREF, which permits conversion of military grid reference coordinates to geographical coordinates (latitude-longitude), was obtained from the Defense Mapping Agency (DMA), making it possible to computer generate distribution maps with either of the above type of coordinates. All available medium and large scale maps (over 2000), and gazeteers were obtained for Middle and South America from the DMA. The following collection records were submitted to the computer master file via ENTREX: (1) 61 collections containing about 3600 specimens from Ecuador and (2) 1100 collections for 15 of the 43 Middle and South American countries concerning the Albimanus Section of Anopheles (Nyssorhynchus) (Paran, 1980).

### SUMMARY

The Mosquito Information Management Project was initiated in 1979 for the purpose of developing a computer-based systematic and ecological master file (data bank) of the National Museum Mosquito Collection housed in the Smithsonian Institution. The approximately 500,000 specimens with associated data constitute the best mosquito collection in the world. The data management system SELGEM (Self-Generating Master) was adapted to meet the needs of the project.

A new mosquito collection information format has been developed, and programmed for ENTREX (data input hardware-software system) and the Honeywell 6620 computer. ENTREX indices were created for collectors, depositories and countries to permit use of abbreviations in collection records. Five sub-programs were written to test the capability of SELGEM in addressing specialized questions to ensure its competence in handling hierarchically arranged data. The computer program, MILREF, which permits conversion of military grid reference coordinates to geographical coordinates (latitude-longitude), was obtained from the Defense Mapping Agency (DMA), making it possible to computer-generate distribution maps with either of the above type of coordinates. All available medium and large scale maps (over 2000), and gazeteers were obtained for Middle and South America from the DMA. The following collection records were submitted to the computer master file via ENTREX: (1) 61 collections containing about 3600 specimens from Ecuador and (2) 1100 collections for 15 of the 43 Middle and South American countries concerning the Albimanus Section of Anopheles (Nyssorhynchus) (Faran, 1980).



## FORWARD

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## INTRODUCTION

The Mosquito Information Management Project is a definitive study that will result in the development of a computer-based systematic and ecological master file (data bank) of the United States National Museum Mosquito Collection, the largest and best such collection in the world. The master file will: (1) provide important, easily accessible, coordinated systematic, ecologic, and vector data to the military, public health organizations and other scientific and environmental agencies; (2) enhance and support research conducted by Department of Entomology, AFRIMS Medical Research Laboratory, Thailand, U.S. Army Medical Research Unit Brasilia (USAMRU), and the Medical Entomology Project (MEP); (3) provide knowledge of gaps in the collection and allow new collection strategies; (4) alleviate managerial problems by providing a timely and cost-efficient collection inventory; and (5) serve as a model for data capture involving mosquito biology throughout the world.

The Mosquito Information Management Project works in close association with the Department of Entomology, Walter Reed Army Institute of Research and the Medical Entomology Project, Smithsonian Institution, and is designed to be responsive to each of their needs.

## REVIEW OF PROGRESS FOR THE PERIOD

1 September 1979 to 31 May 1980

### I. Equipment and Personnel

- A. Museum technician, Charlotte Burnett, was hired and she began work on 1 September 1979.
- B. The following equipment was ordered and received: Hazeltine 1510 CRT terminal; Anadex Printer, and; Techtran 816 datacassette.

### II. Development of SELGEM Master File and Querying Capabilities

- A. Collection Form (Appendix 1) - A new collection information form was designed to assist in data entry and expand retrieval capabilities. This new form has combined features of the forms of the project Mosquitoes of Middle America (MOMA) and the Medical Entomology Project (MEP). In addition, this form allows gathering of data on the (1) medical importance of each species, (2) museum data, (3) name of individual who determined species, (4) synonyms, (5) important reference(s), (6) type-data (if collection contains types) and (7) species code (explained in 1980 research proposal). These forms have been adopted by MEP and were field tested January-February 1980, in South Africa by Dr. Y.-M. Huang.
- B. SELGEM Master File and Data Entry
  - 1. SELGEM Program - A custom auxillary program was designed and written to handle the hierarchically arranged data included in the new collection information form. In a hierarchical file such as this, data is arranged in a pyramid fashion, that is, for any one particular category within a record there may be several, independent subcategories. In order to gain maximal

accessibility to the information stored in this kind of file the computer must be able to search and associate data stored among the many records, and also the data in the different subcategories within a single record.

2. ENTREX Program and Files - The format of the new collection record was programmed into the hardware-software system, ENTREX, which greatly increases efficiency of data entry (Appendix 2 and see methods in 1980 proposal). ENTREX indices were created for collectors, depositories and countries to permit use of abbreviations in the collection records.
3. Collection Records in Master File
  - a) Ecuador File - 61 collection records concerning about 3600 specimens were submitted to the computer via ENTREX as part of an initial test of SELGEM's capability (see 4, below).
  - b) Nyssorhynchus collection - 1100 collection records, with associated species, for 15 of the 43 Middle and South American countries for the Albimanus section of Nyssorhynchus (Faran, 1980) have been submitted to computer.
4. SELGEM Subprograms - Five computer subprograms have been developed to test the ability of SELGEM in addressing specialized questions. The SELGEM system was tested with the Ecuador file, before building other files, to ensure that it was capable of associating data in a hierarchical fashion. To test this the following questions were presented to SELGEM (answers in Appendix 3):

- a) What species have been collected in association with Culex (Mel.) bastagarius in Ecuador?
- b) Where has Anopheles (Nys.) trinkae been collected in Ecuador?
- c) Has An. (Nys.) trinkae ever been collected in ground pools? Where?
- d) How many larval-pupal-female and larval-pupal-male individual rearings of An. (Nys.) trinkae are from Ecuador?
- e) What months of the year has An. (Nys.) rangeli been collected in Ecuador?
- f) Has An. (Nys.) trinkae been collected above 250 M elevation in Ecuador? Where?
- g) List the locality data, general environment, and immature habitats for all the collections which include An. (Nys.) trinkae from Ecuador.
- h) Has An. (Nys.) trinkae been collected with An. (Nys.) rangeli in Ecuador? In what type of habitat?

5. Computer Conversion of Military Grid Reference Coordinates to Geographic Coordinates (latitude-longitude) -

A computer program, written in FORTRAN IV entitled MILREF, was obtained from the Defense Mapping Agency (DMA). MILREF converts military grid reference coordinates to geographic coordinates. Most of the locality data on the MOMA and MEP forms is recorded in military grid coordinates; however, the computerized plotter at the Smithsonian can only plot distribution maps with geographic coordinates. The acquisition of MILREF now permits the generation of extremely accurate computer-plotted, species distribution maps with locality data in either military grid reference

coordinates or geographic coordinates.

6. Maps - All available medium and large scale maps (over 2000), and gazeteers were obtained for Middle and South America from the DMA. These maps will be used to verify locality data recorded on the collection records.
7. Presentation at Annual Meeting of American Society of Tropical Medicine and Hygiene (ASTMH) - An abstract has been submitted to ASTMH for a paper on the Mosquito Information Management Project to be presented at the 1980 annual meeting scheduled 5-7 November.

#### VISITORS

Visitors to this project include Dr. Charles L. Bailey (WRAIR, Washington, D.C.), Dr. John N. Belkin (University of California, Los Angeles, CA), Dr. Theodore J. Crovello, (University of Notre Dame, Notre Dame, Indiana), Dr. Richard H. Foote (U.S.D.A., Washington, D.C.), Dr. Kenneth J. Linthicum (WRAIR, Washington, D.C.), Dr. L. P. Lounibos (Florida Medical Entomology Laboratory, Vero Beach, FL), Drs. Adel Merdan and Sherif El Said (Malaria Research Unit, Ain Shams University, (Cairo, Egypt), and Dr. David L. Vincent (U.S.D.A. Importation Project, Beltsville, MD).

Appendix 1  
New Collection Form

**SMITHSONIAN INSTITUTION  
MEDICAL ENTOMOLOGY PROJECT**

SI-17  
Rev. 6-12-64

**Collection Form**

**LOCALITY**

Country Code	Nearest Town	Elevation
Number	Specific Locality	Date
Country	Map Designation	Time
State, Province or Department	Grid Coordinates	Photo
Second Administrative Division	Latitude and Longitude	Collector

<p><b>GENERAL ENVIRONMENT</b></p> <p>1. Air temp _____  a. Wet _____ °C  b. Dry _____ °C</p> <p>2. % RH _____</p> <p>3. Water temp _____ °C</p> <p>4. Wind _____ kph  a. none  b. light  c. medium  d. strong  e. gale</p> <p>5. Sky  a. clear  b. partially cloudy  c. overcast  d. fog  e. mist  f. light rain  g. heavy rain</p> <p>6. Annual rainfall _____ mm</p> <p>7. Rainy season months  JFMAMJJASONDJFM</p> <p>8. Topography  a. mountain  b. hill  c. valley  d. plateau  e. plain</p> <p>9. Latitudinal regions  a. subpolar  b. boreal  c. cool temperate  d. warm temp/subtropical  e. tropical</p> <p>10. Altitudinal belt  a. alpine  b. subalpine  c. montane  d. lower montane  e. near sea level</p> <p>11. Life zone  a. Holdridge _____  b. other _____</p> <p>12. Vegetation types  a. gymnosperms  b. angiosperms      1. monocots      2. dicots  c. deciduous  d. nondeciduous  e. broad leaved</p>	<p>f. needle leaved  g. bryophytes  h. fungi  i. other</p> <p>13. Woody plants _____  a. height range      0-2.5-15-30 m  b. density      1. 0 total absence      2. 1 low      3. 2 medium      4. 3 high</p> <p>14. Herbs and grasses _____  a. height range      0-0.5-1-2-5-8 m  b. density      1. 0      2. 1      3. 2      4. 3</p> <p>15. Epiphytes _____  a. density      1. 0      2. 1      3. 2      4. 3</p> <p>16. Edge effect, edge or interior of  a. vegetation  b. swamp  c. road  d. dike  e. bank  f. other _____</p> <p>17. Water effect, shore or margin of  a. sea  b. lake  c. stream  d. river  e. swamp  f. salt marsh  g. other _____</p> <p>18. Human influence  a. clearing  b. grazing  c. plantation  d. cultivation  e. domestic  f. pollution  g. other _____</p>	<p><b>HABITAT OF IMMATURES</b></p> <p>1. Modifiers of breeding site  a. large  b. medium  c. small  d. natural  e. artificial  f. other _____</p> <p>2. Breeding site  a. pond  b. lake  c. ground pool  d. flooded pool  e. animal track  f. anim. container  g. swamp, marshy depression  h. marsh      1. fresh 2. tidal  i. flooded forest  j. seepage, spring  k. well  l. stream      1. margin 2. tidal      3. pool  m. ditch, drain, canal  n. pit  o. fountain  p. gutter  q. road rut; wheel track  r. crabhole  s. rockhole      1. volcanic      2. coral      3. boulder at stream margin      4. seaside  t. rockpool  u. stump  v. treehole  w. bamboo      1. cut or broken      2. stump      3. split      4. uncut internode  x. flower bract, spathe  y. attached fruit, nut or pod  z. leaf axil      1. epiphytic      2. terrestrial  aa. pitcher plant  bb. fallen plant part      1. tree</p>	<p>2. leaf _____  3. frond _____  4. spathe _____  5. fruit _____  6. nut _____  7. rind _____  cc. artif. container _____  dd. trap, bamboo pot _____  ee. other _____</p> <p>3. Light  a. deep shade  b. partial shade  c. full sun</p> <p>4. Height of site above ground _____ m</p> <p>5. Dist. collection from nearest home _____ m</p> <p>6. Water  a. permanence      1. permanent      2. semipermanent      3. temporary  b. movement      1. stagnant      2. slow      3. moderate      4. strong  c. turbidity      1. clear      2. turbid  d. color _____  e. pH _____  f. hardness _____  g. salinity      1. fresh      2. brackish      3. salty  h. pollution      1. anaerobic      2. other _____  i. bottom      1. mud      2. sand      3. gravel      4. rock      5. organic matter          a. plant _____          b. animal _____</p> <p>7. Collection method _____</p>	<p>8. Aquatic vegetation  a. quantity      1. none      2. scarce      3. some      4. abundant  b. location      1. submerged      2. floating      3. emergent  c. type      1. grassy      2. herbaceous      3. woody      4. algae          a. green          b. brown          c. blue-green          d. other _____      5. other _____</p> <p><b>HABITAT OF ADULTS</b></p> <p>1. Specific site _____</p> <p>2. Dist. collection from nearest home _____</p> <p>3. Ht. above ground _____</p> <p>4. Collection method  a. light trap  b. bait trap  c. sweeping  d. aspirator  e. other _____</p> <p>5. Behavior  a. resting      1. house      2. animal shelter      3. cave      4. treehole      5. vegetation      6. other _____  b. biting      1. animal      2. human  c. landing      1. animal      2. human  d. swarming  e. mating  f. flying  g. attracted to  h. other _____</p>
--	---	---	---	--

REMARKS:

No. \_\_\_\_\_

MUSEUM DATA

Species	MASS REARINGS										Det.	Medical Importance	Sp. Code	Depository			Synonyms	Bibliography
	L	I	P	P	M	F	E	♂	♀	G				Original	Next Sequential	Locality		
-1																		
-2																		
-3																		
-4																		
-5																		
-6																		
-7																		
-8																		
-9																		

REMARKS

✓ present 0 lost + dead, preserved in alcohol

INDIVIDUAL REARINGS

Ind	MASS REARINGS										Det.	Medical Importance	Sp. Code	Depository			Synonyms	Bibliography
	L	I	P	P	M	F	E	♂	♀	G				Original	Next Sequential	Locality		
-100																		
-101																		
-102																		
-103																		
-104																		
-105																		
-106																		
-107																		
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-125																		
-126																		
-127																		
-128																		
-129																		

TYPE DATA

- Species: \_\_\_\_\_
- Kind of type(s), life stages, type numbers: \_\_\_\_\_
- Method of preparation: \_\_\_\_\_
- Type designator: \_\_\_\_\_
- Date of designation: \_\_\_\_\_
- Type name: \_\_\_\_\_
- Original type name: \_\_\_\_\_



## Appendix 2

### ENTREX Format

LOC

ENTREX DATA ENTRY FORMAT

MOSQUITO S E L G E M PROJECT

LOCALITY

LOC CODE	:	---	
COUNTRY	:	-----	
PROVINCE	:	-----	
SEC ADM DIV	:	-----	
NEAREST TOWN	:	-----	
SPEC LOC	:	-----	
MAP DESIG	:	-----	
GRID COORDN	:	-----	
LAT-LONG	:	-----	
DATE	:	---	TIME: -----
COLLECTOR	:	-----	ELEVATION: -----
	:	-----	PHOTO: -----

LOGN

LOCALITY NUMBER: -----

## ENV

## GENERAL ENVIRONMENT

AIR TEMP	-----	
REL HUMIDITY	-----	
WATER TEMP	-----	
WIND KPH	-----	
SKY DESCR	-----	
ANNUAL RAIN	-----	
TOPOGRAPHY	-----	
LAT. REGIONS	-----	
LIFE ZONE	-----	
HOLCRIDGE	-----	
OTHER	-----	
VEG. TYPES	-----	
A THRU H	-----	
OTHER	-----	
WOODY PLANTS	-----	
HT. RANGE	-----	
HRBS-GRASSES	-----	
HT. RANGE	-----	
EPIPHYTES	-----	
EDGE EFFECT	-----	
WATER EFFECT	-----	
HUMAN INFLU	-----	

	WIND DESCR:	-----
	RAINY MO. :	-----
	ALT. BELTS :	-----

	DENSITY:	-----
	DENSITY:	-----
	DENSITY:	-----

HIM

## HABIT OF IMMATURES

MOOF BREED : \_\_\_\_\_  
 BREED SITE : \_\_\_\_\_  
 LIGHT : \_\_\_\_\_ HEIGHT ABOVE GRND: \_\_\_\_\_  
 WATER : \_\_\_\_\_  
 PERMANENCE : \_\_\_\_\_ MOVEMENT : \_\_\_\_\_  
 TURBIDITY : \_\_\_\_\_ COLOR : \_\_\_\_\_ PH: \_\_\_\_\_  
 SALINITY : \_\_\_\_\_ POLLUTION: \_\_\_\_\_  
 BOTTOM : \_\_\_\_\_  
 COLL METHOD: \_\_\_\_\_  
 AQUATIC VEG : \_\_\_\_\_ LOCATION: \_\_\_\_\_  
 QUANTITY : \_\_\_\_\_  
 TYPE : \_\_\_\_\_  
 ALGAE DSCR: \_\_\_\_\_  
 ALGAE, DEN: \_\_\_\_\_

HAD

## HABIT OF ADULTS

SPEC SITE : \_\_\_\_\_ DIST COLL NEAREST HOME : \_\_\_\_\_  
 HT. ABOVE : \_\_\_\_\_  
 GROUND : \_\_\_\_\_ COLLECTION METHOD : \_\_\_\_\_  
 BEHAVIOR : \_\_\_\_\_  
 RESTING : \_\_\_\_\_ OTHER : \_\_\_\_\_  
 BITING : \_\_\_\_\_  
 LANDING : \_\_\_\_\_  
 SWARMING : \_\_\_\_\_  
 MATING : \_\_\_\_\_

GRMK

18

LOCALITY, GENERAL ENVIRONMENT, HABIT OF IMMATURES AND HABIT OF ADULTS

R E M A R K S

LINE 1 :-----

LINE 2 :-----

LINE 3 :-----

LINE 4 :-----

LINE 5 :-----

MASSR

19

MASS REARINGS

SPECIES : \_\_\_\_\_ DET: \_\_\_\_\_

STAGES L L P P M F E G

MDL IMPOR : \_\_\_\_\_ SPEC CODE: \_\_\_\_\_

MUSEUM DATA..... DEPOSITORY ORIG DEPOSITORY NEXT SEQ DEPOSITORY

\_\_\_\_\_

SYNONYMS : \_\_\_\_\_

BIBLIOG : \_\_\_\_\_



INDR

## INDIVIDUAL RERINGS

IND	SPECIES.....	L	P	M	F	G
---	-----	-	-	-	-	-

MRMK

## MRS AND INDIVIDUAL REARINGS

## REMARKS

LINE 1 : -----  
LINE 2 : -----  
LINE 3 : -----  
LINE 4 : -----  
LINE 5 : -----

## TDATA

## T Y P E    D A T A

1. SPECIES: -----
2. KIND OF TYPE(S), LIFE STAGES, TYPE  
NUMBERS: -----
3. METHOD OF PREPARATION: -----
4. TYPE DESIGNATOR: -----
5. DATE OF DESIGNATION: -----
6. TYPE NAME: -----
7. ORIGINAL TYPE NAME: -----
8. TYPE PUBLICATION: -----

Appendix 3  
Sample Queries

DATE: 02/07/60

BASTAGARIUS AND ASSOCIATED SPECIES  
MASTER LIST

PAGE NO: 1

SERIAL CATEG LINE .....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....

What species have been collected in association  
with Cx. (Mel.) bastagarius in Ecuador?

00000010	005	01	ECU	
	010	01	ECUADOR	
	015	01	PASTAZA	
	025	01	PUYO	
	045	01	01 28 --S. 077 59 --W	
	050	01	000953	
	055	01	05 MAY 1977	
	070	01	YIAU-MIN HUANG	
00000110	090	01	4	
	136	01	SCRUB	
	160	01	ALONG ROAD; NOT MAIN ROAD	
	170	01	DISTANCE FROM NEAREST HOME 100-999 M	
	200	01	LARGE	
	205	01	POND; LAKE	
	210	01	FULL SUN	
	220	01	TEMPORARY	
	250	01	FRESH	
	275	01	SUBMERGED; EMERGENT	
	285	01	GREEN	
00000120	600	01	MR	
	605	01	1 AN. (NYS.) TRINKAE	
	610	01	001 001 *** *** *** *** ***	
	640	01	M. E. FARAN	
00000121	600	01	MR	
	605	01	2 CX. (MEL.) BASTAGARIUS	
00000010	005	01	ECU	
	010	01	ECUADOR	
	015	01	PASTAZA	
	025	01	PUYO	
	045	01	01 28 --S. 077 59 --W	
	050	01	000953	
	055	01	05 MAY 1977	
	070	01	YIAU-MIN HUANG	
00000220	090	01	6	
	136	01	SCRUB	
	170	01	DISTANCE FROM NEAREST HOME 100-999 M	
	200	01	SMALL; LONG	
	205	01	STREAM; POOL	
	210	01	FULL SUN	
	220	01	TEMPORARY	
	230	01	CLEAR	
	250	01	FRESH	
	280	01	SUBMERGED; FLOATING; EMERGENT	
	285	01	GREEN	

DATE: 02/07/80

BASTAGARIUS AND ASSOCIATED SPECIES  
MASTER LIST

PAGE NO: 2

SERIAL CATEG LINE .....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....

00000220 500 C1 IR 100a AND 100b ENTERED AS 100 AND 101. IR 100b WITH 2 1.

00000230 600 01 MR  
605 01 1 CX. (MEL.) PILOSUS  
610 01 004 \*\*\* \*\*\* \*\*\* \*\*\*  
640 01 S. SIRIVANAKARN

00000231 600 01 MR  
605 01 2 CX. (MEL.) BASTAGARIUS

00000232 600 01 MR  
605 01 3 CX. (MEL.) SURSUMPTOR

00000233 600 01 MR  
605 01 4 AN. (NYS.) TRINKAE

00000280 005 01 ECU  
010 01 ECUADOR  
015 01 PASTAZA  
025 01 PUJO  
030 01 20 KM N  
050 01 001000  
055 01 06 MAY 1977  
070 01 YIAU-MIN HUANG

00000290 090 01 8  
120 01 VALLEY  
136 01 SCRUB  
170 01 DISTANCE FROM NEAREST HOME 10-93 M  
200 01 LARGE  
205 01 POND  
210 01 FULL SUN  
220 01 PERMANENT  
225 01 SLOW  
235 01 SLIGHTLY  
250 01 FRESH  
275 01 SUBMERGED; FLOATING; EMERGENT  
285 01 BROWN  
290 01 SCARCE  
500 01 IR 103a. b, AND C ENTERED IN MR.

00000300 600 01 MR  
605 01 1 CX. (MEL.) BASTAGARIUS  
610 01 004 001 \*\*\* 003 002 003 \*\*\*  
640 01 S. SIRIVANAKARN

00000322 600 01 MR  
605 01 5 AN. (NYS.) TRINKAE

00001090 005 01 ECU  
010 01 ECUADOR

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BASTAGARIUS AND ASSOCIATED SPECIES  
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.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....

SERIAL CATEG LINE

00001090	015	01	PASTAZA
	025	01	PUYO
	030	01	39 KM N
	050	01	001750
	055	01	06 MAY 1977
	070	01	YIAU-MIN HUANG
00001100	090	01	9
	120	01	VALLEY
	136	01	SCRUB
	150	01	ALONG ROAD
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL
	205	01	POND; LAKE; GROUND POOL
	210	01	PARTIAL SHADE
	220	01	TEMPORARY
	225	01	STAGNANT
	235	01	COLORS
	250	01	FRESH
	275	01	SUBMERGED; EMERGENT
	285	01	GREEN
	500	01	IR 112a ENTERED AS 112.
00001110	600	01	MR
	605	01	1 AN. (NYS.) TRINKAE
	610	01	*** 001 031 *** *** *** ***
	640	01	M. E. FARAN
00001120	600	01	MR
	605	01	2 CX. (MEL.) BASTAGARIUS
	610	01	003 *** *** *** *** *** ***
	640	01	S. SIRIVANAKARN
00001121	600	01	MR
	605	01	3 AN. (NYS.) RANGELI
00001122	600	01	MR
	605	01	4 WY. SPS.
00001123	600	01	MR
	605	01	5 CX. (CUX.) SPS.
00001124	600	01	MR
	605	01	6 UR. (URA.) SPS.
00001125	600	01	MR
	605	01	7 CX. (CUX.) SPS.
00001360	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA

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SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00001360	025	01	PUYO
	030	01	4 KM NE
	050	01	001250
	055	01	07 MAY 1977
	070	01	YIAU-MIN HUANG
00001370	090	01	10
	120	01	VALLEY
	160	01	ALONG ROAD
	170	01	PLANTATION; SUGARCANE; DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	275	01	SUBMERGED; EMERGENT
	290	01	SCARCE
	500	01	IR 121a AND b ENTERED IN MR.
00001380	600	01	MR
	605	01	1 CX. (MEL.) PILOSUS
	610	01	*** 001 001 *** *** ***
	640	01	S. SIRIVANAKARN
00001390	600	01	MR
	605	01	2 CX. (MEL.) BASTAGARIUS
	610	01	*** 004 005 *** 001 001 *** ***
	340	01	S. SIRIVANAKARN
00001400	600	01	MR
	605	01	3
	610	01	004 *** *** *** *** ***
00001402	600	01	MR
	605	01	5 AN. (NYS.) RANGELI
00001360	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	4 KM NE
	050	01	001250
	055	01	07 MAY 1977
	070	01	YIAU-MIN HUANG
00001680	090	01	11
	120	01	VALLEY
	160	01	ALONG ROAD
	170	01	PLANTATION; SUGARCANE; DISTANCE FROM NEAREST HOME 100-999 M



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BASTAGARIUS AND ASSOCIATED SPECIES  
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SERIAL CATEG LINE .....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....

00001680	200	01	SMALL	
	205	01	GROUND POOL	
	210	01	FULL SUN	
	220	01	TEMPORARY	
	225	01	STAGNANT	
	230	01	CLEAR	
	250	01	FRESH	
	275	01	SUBMERGED; EMERGENT	
	285	01	GREEN; BROWN	
	290	01	SCARCE	
	500	01	TWO WHOLE MOUNTED ADULTS INCLUDED IN MR 4.	
00001690	600	01	MR	
	605	01	1 AN. (NYS.) TRINKAE	
	610	01	002 001 001 *** *** *** ***	
	640	01	M. E. FARAN	
00001710	600	01	MR	
	605	01	3 CX. (MEL.) PILOSUS	
	610	01	*** 001 001 *** *** *** ***	
	640	01	S. SIRIVANAKARN	
00001720	600	01	MR	
	605	01	4 CX. (MEL.) BASTAGARIUS	
	610	01	001 001 *** *** *** ***	
	640	01	S. SIRIVANAKARN	
00001820	005	01	ECU	
	010	01	ECUADOR	
	015	01	PASTAZA	
	025	01	PUYO	
	030	01	5 KM NE	
	050	01	001250	
	055	01	07 MAY 1977	
	070	01	YIAU-MIN HUANG	
00001830	090	01	12	
	120	01	VALLEY	
	160	01	ALONG ROAD	
	170	01	DISTANCE FROM NEAREST HOME 100-959 M	
	200	01	LARGE	
	205	01	GROUND POOL	
	210	01	FULL SUN	
	220	01	TEMPORARY	
	225	01	STAGNANT	
	230	01	CLEAR	
	250	01	FRESH	
	275	01	SUBMERGED; EMERGENT	
	285	01	GREEN; SLIGHTLY GREEN	
	290	01	SCARCE	
	500	01	TWO WHOLE MOUNTED ADULTS INCLUDED IN MR.	

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.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....

SERIAL CATEG LINE

00001840	600	01	MR
	605	01	1 CX. (MEL.) BASTAGARIUS
	610	01	002 001 002 004 002 002 *** ***
	640	01	S. SIRIVANAKARN
00001980	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	5.3 KM NE
	050	01	001250
	055	01	07 MAY 1977
	070	01	YIAU-MIN HUANG
00001990	090	01	13
	120	01	VALLEY
	136	01	SCRUB
	165	01	STREAM
	170	01	DISTANCE FROM NEAREST HOME 10-99 M
	200	01	LARGE
	205	01	POND
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	250	01	FRESH
	275	01	SUBMERGED: EMERGENT
	285	01	GREEN: BROWN
	400	01	2 LARGE GREEN PUPAE: 1 LARGE GREEN LARVA: ANOPHELES LARVA.
	500	01	ONE WHOLE MOUNTED ADULT INCLUDED IN MR.
00002000	600	01	MR
	605	01	1 CX. (MEL.) BASTAGARIUS
	610	01	001 002 001 001 *** *** ***
	640	01	S. SIRIVANAKARN
00001980	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	5.3 KM NE
	050	01	001250
	055	01	07 MAY 1977
	070	01	YIAU-MIN HUANG
00002050	090	01	14
	120	01	VALLEY
	136	01	SCRUB
	160	01	ALONG ROAD
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL
	205	01	GROUND POOL

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BASTAGARIUS AND ASSOCIATED SPECIES  
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SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00002050	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	275	01	SUBMERGED; EMERGENT
	290	01	SCARCE
	500	01	IR 141 DAMAGED.
		02	IR 154a. C. AND e RECORDED IN MR 2.
		03	IR 154b AND d RECORDED IN MR 5 AND 6.
00002060	600	01	MR
	605	01	1 CX. (MEL.) PILOSUS
	610	01	001 *** *** *** *** ***
	640	01	S. SIRIVANAKARN
00002070	600	01	MR
	605	01	2 CX. (MEL.) BASTAGARIUS
	610	01	002 003 001 003 001 002 *** ***
	640	01	S. SIRIVANAKARN
00002083	600	01	MR
	605	01	8 CX. (CUX.) SPS.
00002084	600	01	MR
	605	01	5 AN. (NYS.) RANGELI
	610	01	*** 002 *** 001 *** 001 *** ***
	640	01	M. E. FARAN
00002085	300	01	MR
	605	01	6 CX. (MEL.) SPS.
	610	01	*** 002 *** 001 001 *** *** ***
	640	01	S. SIRIVANAKARN
00002830	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	16 KM NE
	050	01	001000
	055	01	07 MAY 1977
	070	01	YIAU-MIN HUANG
00002840	090	01	15
	120	01	VALLEY
	136	01	SCRUB
	173	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY

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BASTAGARIUS AND ASSOCIATED SPECIES  
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.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....

SERIAL CATEG LINE

00002840	225 01	STAGNANT
	235 01	COLORS
	250 01	FRESH
	275 01	SUBMERGED: EMERGENT
	285 01	GREEN: BROWN
	290 01	SCARCE
	500 01	IR 100a AND b ENTERED AS MR 1.
00002845	600 01	MR
	605 01	1 CX. (MEL.) BASTAGARIUS
	610 01	*** 002 *** 002 001 *** ***
	640 01	S. SIRIVANAKARN
00002846	600 01	MR
	605 01	2 AN. (NYS.) TRINKAE
00002847	600 01	MR
	605 01	3 AN. (NYS.) RANGELI
00003250	005 01	ECU
	010 01	ECUADOR
	015 01	PASTAZA
	025 01	PUYO
	045 01	01 28 --S. 077 59 --W
	050 01	000953
	055 01	08 MAY 1977
	070 01	YTAU-MIN HUANG
00003770	090 01	18
	120 01	VALLEY
	160 01	ALONG ROAD
	165 01	STREAM
	170 01	DISTANCE FROM NEAREST HOME 100-999 M
	200 01	LARGE
	205 01	GROUND POOL: POND-LIKE
	210 01	FULL SUN
	220 01	TEMPORARY
	225 01	STAGNANT
	235 01	COLORS
	250 01	FRESH
	275 01	SUBMERGED: EMERGENT
	285 01	GREEN
00003780	600 01	MR
	605 01	1 CX. (MEL.) PILOSUS
	610 01	*** 002 001 002 002 *** ***
	640 01	S. SIRIVANAKARN
00003801	600 01	MR
	605 01	4 AN. (NYS.) TRINKAE

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.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....

SERIAL CATEG LINE

00003802 600 01 MR  
605 01 5 CX. (MEL.) BASTAGARIUS

00005180 005 01 ECU  
010 01 ECUADOR  
015 01 PASTAZA  
025 01 PUYO  
030 01 12 KM W  
050 01 001250  
055 01 09 MAY 1977  
070 01 YIAU-MIN HUANG

00005190 090 01 23  
120 01 VALLEY  
165 01 STREAM  
170 01 DISTANCE FROM NEAREST HOME 100-999 M  
200 01 LARGE  
205 01 GROUND POOL  
210 01 FULL SUN  
220 01 TEMPORARY  
225 01 STAGNANT  
230 01 CLEAR  
250 01 FRESH  
270 01 ABUNDANT  
275 01 SUBMERGED; EMERGENT

00005195 600 01 MR  
605 01 1 CX. (MEL.) BASTAGARIUS

00005196 600 01 MR  
605 01 2 AN. (NYS.) TRINKAE

00005450 005 01 ECU  
010 01 ECUADOR  
015 01 PASTAZA  
025 01 PUYO  
030 01 40 KM NE  
050 01 000500  
055 01 11 MAY 1977  
070 01 YIAU-MIN HUANG

00005480 090 01 24  
120 01 VALLEY  
160 01 ALONG ROAD  
170 01 DISTANCE TO NEAREST HOME 100-999 M  
200 01 SMALL  
205 01 GROUND POOL  
210 01 FULL SUN  
220 01 TEMPORARY  
225 01 STAGNANT  
235 01 COLORED

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SERIAL CATEG LINE .....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....

00005460	250	01	FRESH
	270	01	SCARCE
	275	01	SUBMERGED; EMERGENT
	285	01	GREEN
00005465	600	01	MR
	605	01	1 CX. (MEL.) BASTAGARIUS
00005466	600	01	MR
	605	01	2 CX. (CUX.) SPS.
00005467	600	01	MR
	605	01	3 UR. (URA.) SPS.
00005540	005	01	ECU
	010	01	ECUADOR
	015	01	NAPO
	025	01	TENA
	030	01	1.5 KM S
	050	01	000510
	055	01	13 MAY 1977
	070	01	YIAU-MIN HUANG
00005550	090	01	26
	120	01	VALLEY
	145	01	WATER HYACINTH; EICHORNIA
	200	01	MEDIUM
	205	01	POND; LAKE
	210	01	FULL SUN
	220	01	PERMANENT
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	ABUNDANT
	275	01	SUBMERGED; EMERGENT
	500	01	IR 109a ENTERED AS 109.
00005555	600	01	MR
	605	01	1 AN. (NYS.) RANGELI
	610	01	001 *** *** *** *** *** ***
	640	01	M. E. FARAN
00005556	600	01	MR
	605	01	2 CX. (MEL.) BASTAGARIUS
00005557	600	01	MR
	605	01	3 AN. (NYS.) TRIANNULATUS
00005558	600	01	MR
	605	01	4 CX. (MEL.) BATESI

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BASTAGARIUS AND ASSOCIATED SPECIES  
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SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00005820	005	01	ECU
	010	01	ECUADOR
	015	01	NAPO
	025	01	TENA
	030	01	32 KM S
	050	01	000700
	055	01	13 MAY 1977
	070	01	YIAU-MIN HUANG
00005830	090	01	27
	120	01	VALLEY
	160	01	ALONG ROAD
	200	01	LARGE
	205	01	GROUND POOL; POND-LIKE GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	SCARCE
	275	01	SUBMERGED; EMERGENT
	500	01	IR 105 RECORDED AS MR 1.
00005835	600	01	MR
	605	01	1 CX. (MEL.) BASTAGARIUS
	610	01	*** *** *** 001 001 *** ***
	640	01	S. SIRIVANAKARN
00005836	600	01	MR
	605	01	2 AN. (NYS.) RANGELI
00005837	600	01	MR
	605	01	3 CX. (MEL.) DUNNI
00006170	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	035	01	01 28 --S. 077 59W
	050	01	000953
	055	01	05 MAY 1977
	070	01	YIAU-MIN HUANG
00006180	090	01	28
	400	01	COL NO 28 IS A MIXED COLLECTION. NUMBER NOT CERTAIN BUT WITH
		02	DEFINITE ASSOCIATED SKINS. ACTUAL DATE LISTED IS 5-9 MAY 1977.
00006181	600	01	MR
	605	01	1 AN. (NYS.) TRIANNULATUS
00006182	600	01	MR

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.....2.....V.....3.....V.....4.....V.... 5.....V.....6.....V.....7.....V....

00006182 605 01 2 CX. (MEL.) BASTAGARIUS

00006210 005 01 ECU  
 010 01 ECUADOR  
 015 01 PASTAZA  
 025 01 PUYO  
 030 01 1.5 KM S  
 050 01 000891  
 055 01 15 MAY 1977  
 070 01 YIAU-MIN HUANG

00006220 090 01 29  
 120 01 VALLEY  
 170 01 DISTANCE FROM NEAREST HOME 100-999 M  
 200 01 LARGE  
 205 01 GROUND POOL  
 220 01 TEMPORARY  
 225 01 STAGNANT  
 235 01 SLIGHTLY  
 250 01 FRESH  
 270 01 ABUNDANT  
 275 01 SUBMERGED; EMERGENT

00006225 600 01 MR  
 605 01 1 CX. (MEL.) PILOSUS

00006226 600 01 MR  
 605 01 2 CX. (MEL.) BASTAGARIUS

00006227 600 01 MR  
 605 01 3 AN. (NYS.) TRINKAE

00006830 005 01 ECU  
 010 01 ECUADOR  
 015 01 PASTAZA  
 025 01 PUYO  
 030 01 4.3 KM E  
 050 01 001000  
 055 01 17 MAY 1977  
 070 01 YIAU-MIN HUANG

00006840 090 01 31  
 120 01 VALLEY  
 170 01 DISTANCE FROM NEAREST HOME 100-999 M  
 200 01 SMALL  
 205 01 GROUND POOL  
 210 01 FULL SUN  
 220 01 TEMPORARY  
 225 01 STAGNANT  
 230 01 CLEAR  
 250 01 FRESH



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.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00006940	270	01	SCARCE
	275	01	SUBMERGED; EMERGENT
00006845	600	01	MR
	605	01	1 CX. (MEL.) PILOSUS
00006846	600	01	MR
	605	01	2 AN. (NYS.) TRINKAE
00006847	600	01	MR
	605	01	3 CX. (MEL.) BASTAGARIUS
00007150	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	1.5 KM S
	050	01	000891
	055	01	19 MAY 1977
	070	01	YIAU-MIN HUANG
00007160	090	01	32
	120	01	VALLEY
	136	01	SCRUB
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	MEDIUM
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	PERMANENT
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	ABUNDANT
	275	01	SUBMERGED; EMERGENT
	500	01	IR 107 AND 107 ENTERED IN MR.
00007170	600	01	MR
	605	01	1 AN. (NYS.) TRINKAE
	610	01	012 *** *** 002 002 *** *** ***
	640	01	M. E. FARAN
00007180	600	01	MR
	605	01	2 AN. (NYS.) RANGELI
	610	01	001 *** *** *** *** *** ***
	640	01	M. E. FARAN
00007182	600	01	MR
	605	01	4 CX. (MEL.) BASTAGARIUS
00007183	600	01	MR
	605	01	5 CX. (MEL.) PILOSUS

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SERIAL CATEG LINE .....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....

00007150	005 01	ECU	
	010 01	ECUADOR	
	015 01	PASTAZA	
	025 01	PUYO	
	030 01	1.5 KM S	
	050 01	000891	
	055 01	19 MAY 1977	
	070 01	YIAU-MIN HUANG	
00007440	090 01	33	
	120 01	VALLEY	
	136 01	SCRUB	
	170 01	DISTANCE FROM NEAREST HOME 100-999 M	
	200 01	SMALL: LONG	
	205 01	GROUND POOL: WHEEL TRACK	
	210 01	FULL SUN	
	220 01	TEMPORARY	
	225 01	STAGNANT	
	230 01	CLEAR	
	250 01	FRESH	
	270 01	SCARCE	
	275 01	SUBMERGED: EMERGENT	
	285 01	GREEN	
	500 01	IR 102 DAMAGED.	
00007450	600 01	MR	
	605 01	1 AN. (NYS.) TRINKAE	
	610 01	001 *** *** *** *** *** ***	
	640 01	M. E. FARAN	
00007460	600 01	MR	
	605 01	2 CX. (MEL.) BASTAGARIUS	
	610 01	*** 002 *** *** *** *** ***	
	640 01	S. SIRIVANAKARN	
00007461	600 01	MR	
	605 01	3 CX. (MEL.) PILOSUS	
00007150	005 01	ECU	
	010 01	ECUADOR	
	015 01	PASTAZA	
	025 01	PUYO	
	030 01	1.5 KM S	
	050 01	000891	
	055 01	19 MAY 1977	
	070 01	YIAU-MIN HUANG	
00009320	090 01	34	
	120 01	VALLEY	
	136 01	SCRUB	
	170 01	DISTANCE FROM NEAREST HOME 100-999 M	

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SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00009320	200	01	SMALL; LONG
	205	01	GROUND POOL; WHEEL TRACK
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	SCARCE
	275	01	SUBMERGED; EMERGENT
00009325	600	01	MR
	605	01	1 CX. (MEL.) PILOSUS
00009326	600	01	MR
	605	01	2 CX. (MEL.) BASTAGARIUS
00009327	600	01	MR
	605	01	3 AN. (NYS.) RANGELI
00009328	600	01	MR
	605	01	4 AN. (NYS.) TRINKAE
00010180	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	23 KM SE
	050	01	000770
	055	01	19 MAY 1977
	070	01	YIAU-MIN HUANG
00010190	090	01	35
	120	01	VALLEY
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	LARGE
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	MUDDY
	250	01	FRESH
	270	01	SCARCE
	275	01	SUBMERGED; EMERGENT
00010191	600	01	MR
	605	01	1 CX. (MEL.) PILOSUS
00010192	600	01	MR
	605	01	2 CX. (MEL.) BASTAGARIUS
00010193	600	01	MR

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SERIAL	CATEG LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00010193	605 01	3 AN. (NYS.) RANGELI
00010520	005 01	ECU
	010 01	ECUADOR
	015 01	PASTAZA
	025 01	PUYO
	045 01	01 28 --S. J77 59W
	050 01	000953
	055 01	15 MAY 1977
	070 01	YIAU-MIN HUANG
00010530	090 01	36
00010540	600 01	MR
	605 01	1 CX. (MEL.) BASTAGARIUS
	610 01	*** *** *** 1 *** *** ***
	640 01	S. SIRIVANAKARN
00012490	005 01	ECU
	010 01	ECUADOR
	015 01	NAPO
	025 01	TENA
	030 01	11.7 KM SW
	055 01	25 MAY 1977
	070 01	YIAU-MIN HUANG
00012500	090 01	40
	120 01	VALLEY
	136 01	SCRUB
	160 01	ALONG ROAD
	170 01	DISTANCE FROM NEAREST HOME 100-999 M
	200 01	LARGE
	205 01	GROUND POOL
	210 01	FULL SUN
	220 01	TEMPORARY
	225 01	STAGNANT
	235 01	COLOR
	250 01	FRESH
	270 01	ABUNDANT
	275 01	SUBMERGED; EMERGENT
00012510	600 01	MR
	605 01	1 CX. (MEL.) BATESI
	610 01	*** *** *** *** 001 *** ***
	640 01	S. SIRIVANAKARN
00012511	600 01	MR
	605 01	2 AN. (NYS.) RANGELI
00012512	600 01	MR
	605 01	3 UR. (URA.) SPS.

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BASTAGARIUS AND ASSOCIATED SPECIES  
MASTER LIST

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00012513	600	01	MR
	605	01	4 CX. (MEL.) PILOSUS
00012514	600	01	MR
	605	01	5 AN. (NYS.) TRINKAE
00012515	600	01	MR
	605	01	6 CX. (CUX.) SPS.
00012516	600	01	MR
	605	01	7 CX. (MEL.) BASTAGARIUS
00012490	005	01	ECU
	010	01	ECUADOR
	015	01	NAPO
	025	01	TENA
	030	01	11.7 KM SW
	055	01	25 MAY 1977
	070	01	YIAU-MIN HUANG
00013130	090	01	41
	120	01	VALLEY
	136	01	SCRUB
	160	01	ALONG ROAD
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	MEDIUM: LONG
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	235	01	COLORS
	250	01	FRESH
	270	01	ABUNDANT
	275	01	SUBMERGED; EMERGENT
	285	01	GREEN; BROWN
00013131	600	01	MR
	605	01	1 CX. (CUX.) SPS.
00013132	600	01	MR
	605	01	2 CX. (MEL.) PILOSUS
00013133	600	01	MR
	605	01	3 AN. (NYS.) RANGELI
00013134	600	01	MR
	605	01	4 CX. (MEL.) BASTAGARIUS
00013135	600	01	MR
	605	01	5 UR. (URA.) SPS.

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BASTAGARIUS AND ASSOCIATED SPECIES  
MASTER LIST

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SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00013136	600	01	MR
	605	01	6 CX. (MEL.) BATESI
00013390	005	01	ECU
	010	01	ECUADOR
	015	01	NAPO
	025	01	TENA
	030	01	13 KM SW
	050	01	001000
	055	01	25 MAY 1977
	070	01	YIAU-MIN HUANG
00013400	090	01	42
	120	01	VALLEY
	136	01	SCRUB
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	SCARCE
	275	01	SUBMERGED; EMERGENT
00013401	600	01	MR
	605	01	1 CX. (CUX.) SPS.
00013402	600	01	MR
	605	01	2 PS. SPS.
00013403	600	01	MR
	605	01	3 CX. (MEL.) PILOSUS
00013404	600	01	MR
	605	01	4 CX. (MEL.) BASTAGARIUS
00013390	005	01	ECU
	010	01	ECUADOR
	015	01	NAPO
	025	01	TENA
	030	01	13 KM SW
	050	01	001000
	055	01	25 MAY 1977
	070	01	YIAU-MIN HUANG
00013870	090	01	43
	120	01	VALLEY
	136	01	SCRUB
	170	01	DISTANCE FROM NEAREST HOME 100-999 M

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BASTAGARIUS AND ASSOCIATED SPECIES  
MASTER LIST

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SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00013870	200	01	SMALL: LONG
	205	01	GROUND POOL: WHEEL TRACK
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	SCARCE
	275	01	SUBMERGED: EMERGENT
	285	01	GREEN
00013871	600	01	MR
	605	01	1 CX. (MEL.) BASTAGARIUS
00013872	600	01	MR
	605	01	2 AN. (NYS.) TRINKAE
00013990	005	01	ECU
	010	01	ECUADOR
	015	01	NAPO
	025	01	TENA
	030	01	1.5 KM S
	050	01	000510
	055	01	27 MAY 1977
	070	01	YIAU-MIN HUANG
00014000	090	01	44
	120	01	VALLEY
	145	01	WATER HYACINTH: EICHORNIA
	170	01	DISTANCE FROM NEAREST HOME 10-99 M
	200	01	MEDIUM
	205	01	POND: LAKE
	210	01	FULL SUN
	220	01	PERMANENT
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	ABUNDANT
	275	01	SUBMERGED: EMERGENT
	280	01	WATER HYACINTH: EICHORNIA
00014010	600	01	MR
	605	01	1 CX. (MEL.) BASTAGARIUS
	610	01	*** *** *** 001 *** *** ***
	640	01	S. SIRIVANAKARN
00014011	600	01	MR
	605	01	2 CX. (MEL.) BATESI
00014012	600	01	MR
	605	01	3 AN. (NYS.) RANGELI

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BASTAGARIUS AND ASSOCIATED SPECIES  
MASTER LIST

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SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00014370	005	01	ECU
	010	01	ECUADOR
	015	01	NAPO
	025	01	TENA
	030	01	1 KM S
	050	01	000510
	055	01	28 MAY 1977
	070	01	YIAU-MIN HUANG
00014380	090	01	45
	120	01	VALLEY
	170	01	DISTANCE FROM NEAREST HOME 10-99 M
	200	01	SMALL
	205	01	POND; LAKE
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	235	01	COLORS
	250	01	FRESH
	270	01	SCARCE
	275	01	SUBMERGED; EMERGENT
00014381	600	01	MR
	605	01	1 CX. (MEL.) BASTAGARIUS
00014382	600	01	MR
	605	01	2 AN. (NYS.) RANGELI
00014383	600	01	MR
	605	01	3 CX. (MEL.) BATESI
00014384	600	01	MR
	605	01	4 TIPULIDAE
00014385	600	01	MR
	605	01	5 CX. (CUX.) SPS.



BASTAGARIUS AND ASSOCIATED SPECIES

SELGEN MASTER LIST TOTALS:

NUMBER OF LINES PRINTED = 0000853 - NUMBER OF RECORDS PRINTED = 0000155  
NUMBER OF LINES PROCESSED = 0000853 - NUMBER OF RECORDS PROCESSED = 0000155

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LOCALITY DATA ABOUT TRINKAE COLLECTED IN ECUADOR  
MASTER LIST

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SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00000010	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	045	01	01 28 --S. 077 59 --W
	050	01	000953
	055	01	05 MAY 1977
	070	01	YIAU-MIN HUANG
00000110	090	01	4
	136	01	SCRUB
	160	01	ALONG ROAD; NOT MAIN ROAD
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	LARGE
	205	01	POND; LAKE
	210	01	FULL SUN
	220	01	TEMPORARY
	250	01	FRESH
	275	01	SUBMERGED; EMERGENT
	285	01	GREEN
00000120	800	01	MR
	605	01	1 AN. (NYS.) TRINKAE
	610	01	001 001 *** *** *** ***
	640	01	M. E. FARAN
00000010	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	045	01	01 28 --S. 077 59 --W
	050	01	000953
	055	01	05 MAY 1977
	070	01	YIAU-MIN HUANG
00000200	090	01	5
	136	01	SCRUB
	165	01	STREAM
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL
	205	01	STREAM POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	230	01	CLEAR
	250	01	FRESH
	270	01	SUBMERGED
	500	01	2 ANOPHELES LARVAE DIED.
00000210	600	01	MR

List the locality data, general environment, and immature habitats for all the collections which include An. (Nys.) trinkae from Ecuador.

Where has Anopheles (Nys.) trinkae been collected in Ecuador? Plot on map.

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LOCALITY DATA ABOUT TRINKAE COLLECTED IN ECUADOR  
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SERIAL	CATEG	LINE	1 AN. (NYS.) TRINKAE	2	3	4	5	6	7	8
00000210	605	01	1 AN. (NYS.) TRINKAE							
	610	01	002 *** *** *** *** ***							
	640	01	M. E. FARAN							
00000010	005	01	ECU							
	010	01	ECUADOR							
	015	01	PASTAZA							
	025	01	PUYO							
	045	01	01 28 --S. 077 59 --W							
	050	01	000953							
	055	01	05 MAY 1977							
	070	01	YIAU-MIN HUANG							
00000220	090	01	6							
	136	01	SCRUB							
	170	01	DISTANCE FROM NEAREST HOME 100-999 M							
	200	01	SMALL; LONG							
	205	01	STREAM POOL							
	210	01	FULL SUN							
	220	01	TEMPORARY							
	230	01	CLEAR							
	250	01	FRESH							
	280	01	SUBMERGED; FLOATING; EMERGENT							
	285	01	GREEN							
	500	01	IR 100a AND 100b ENTERED AS 100 AND 101. IR 100b WITH 2 I.							
00000233	600	01	MR							
	605	01	4 AN. (NYS.) TRINKAE							
00000280	005	01	ECU							
	010	01	ECUADOR							
	015	01	PASTAZA							
	025	01	PUYO							
	030	01	20 KM N							
	050	01	001000							
	055	01	06 MAY 1977							
	070	01	YIAU-MIN HUANG							
00000290	090	01	8							
	120	01	VALLEY							
	136	01	SCRUB							
	170	01	DISTANCE FROM NEAREST HOME 10-99 M							
	200	01	LARGE							
	205	01	POND							
	210	01	FULL SUN							
	220	01	PERMANENT							
	225	01	SLOW							
	235	01	SLIGHTLY							
	250	01	FRESH							
	275	01	SUBMERGED; FLOATING; EMERGENT							
	285	01	BROWN							

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LOCALITY DATA ABOUT TRINKAE COLLECTED IN ECUADOR  
MASTER LIST

DATE: 02/11/80

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00000290	290	01	SCARCE
	500	01	IR 163a, b, AND c ENTERED IN MR.
00000322	600	01	MR
	605	01	5 AN. (NYS.) TRINKAE
00001090	605	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	39 KM N
	050	01	001750
	055	01	06 MAY 1977
	070	01	YIAU-MIN HUANG
00001100	090	01	9
	120	01	VALLEY
	136	01	SCRUB
	160	01	ALONG ROAD
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL
	205	01	POND; LAKE; GROUND POOL
	210	01	PARTIAL SHADE
	220	01	TEMPORARY
	225	01	STAGNANT
	235	01	COLORS
	250	01	FRESH
	275	01	SUBMERGED; EMERGENT
	285	01	GREEN
	500	01	IR 112a ENTERED AS 112.
00001110	600	01	MR
	605	01	1 AN. (NYS.) TRINKAE
	610	01	*** 001 001 *** *** ***
	640	01	M. E. FARAN
06001360	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	4 KM NE
	050	01	001250
	055	01	07 MAY 1977
	070	01	YIAU-MIN HUANG
00001680	690	01	11
	120	01	VALLEY
	160	01	ALONG ROAD
	170	01	PLANTATION; SUGARCANE; DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL
	205	01	GROUND POOL

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LOCALITY DATA ABOUT TRINKAE COLLECTED IN ECUADOR  
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SERIAL	CATEG LINE	....2....V....3....V....4....V....5....V....6....V....7....V....
00001680	210 01	FULL SUN
	220 01	TEMPORARY
	225 01	STAGNANT
	230 01	CLEAR
	250 01	FRESH
	275 01	SUBMERGED; EMERGENT
	285 01	GREEN; BROWN
	290 01	SCARCE
	500 01	TWO WHOLE MOUNTED ADULTS INCLUDED IN MR 4.
00001690	600 01	MR
	605 01	1 AN. (NYS.) TRINKAE
	610 01	002 001 001 *** *** *** ***
	640 01	M. E. FARAN
00002830	005 01	ECU
	010 01	ECUADOR
	015 01	PASTAZA
	025 01	PUYO
	030 01	16 KM NE
	050 01	001000
	055 01	07 MAY 1977
	070 01	YIAU-MIN HUANG
00002840	090 01	15
	120 01	VALLEY
	136 01	SCRUB
	170 01	DISTANCE FROM NEAREST HOME 100-999 M
	200 01	SMALL
	205 01	GROUND POOL
	210 01	FULL SUN
	220 01	TEMPORARY
	225 01	STAGNANT
	235 01	COLORAD
	250 01	FRESH
	275 01	SUDMERGED; EMERGENT
	285 01	GREEN; BROWN
	290 01	SCARCE
	500 01	IR 100a AND b ENTERED AS MR 1.
00002846	600 01	MR
	605 01	2 AN. (NYS.) TRINKAE
00002830	005 01	ECU
	010 01	ECUADOR
	015 01	PASTAZA
	025 01	PUYO
	030 01	16 KM NE
	050 01	001000
	055 01	07 MAY 1977
	070 01	YIAU-MIN HUANG

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LOCALITY DATA ABOUT TRINKAE COLLECTED IN ECUADOR  
MASTER LIST

DATE: 02/11/80

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00002950	090	01	16
	120	01	VALLEY
	165	01	STREAM
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	TURBID; MUDDY
	250	01	FRESH
	270	01	SCARCE
	500	01	IR 105 WITH BROKEN VIAL FOR P.
00002956	600	01	MR
	605	01	2 AN. (NYS.) TRINKAE
00003250	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	045	01	01 28 --S. 077 59 --W
	050	01	000953
	055	01	08 MAY 1977
	070	01	YIAU-MIN HUANG
00003260	090	01	17
	120	01	VALLEY
	136	01	SCRUB
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL; LONG
	205	01	GROUND POOL; WHEEL TRACK
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	275	01	SUBMERGED; EMERGENT
00003271	600	01	MR
	605	01	2 AN. (NYS.) TRINKAE
00003250	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	045	01	01 28 --S. 077 59 --W
	050	01	000953
	055	01	08 MAY 1977
	070	01	YIAU-MIN HUANG

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LOCALITY DATA ABOUT TRINKAE COLLECTED IN ECUADOR  
MASTER LIST

DATE: 02/11/80

SERIAL CATEG LINE .....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....

00003770	090	01	18	VALLEY
	120	01		ALONG ROAD
	160	01		STREAM
	165	01		DISTANCE FROM NEAREST HOME 100-999 M
	170	01		LARGE
	200	01		GROUND POOL; POND-LIKE
	205	01		FULL SUN
	210	01		TEMPORARY
	225	01		STAGNANT
	235	01		COLOR
	250	01		FRESH
	275	01		SUBMERGED; EMERGENT
	295	01		GREEN
00003801	600	01		MR
	605	01		4 AN. (NYS.) TRINKAE
00004940	005	01		ECU
	010	01		ECUADOR
	015	01		PASTAZA
	025	01		PUYO
	030	01		31 KM W
	050	01		002500
	055	01		09 MAY 1977
	070	01		YIAU-MIN HUANG
00004950	090	01	20	ALONG ROAD
	160	01		SMALL
	200	01		DITCH
	220	01		TEMPORARY
	225	01		STAGNANT
	230	01		CLEAR
	250	01		FRESH
	270	01		SCARCE
	275	01		SUBMERGED; EMERGENT
	500	01		CHARLOTTE COULD NOT FIND SLIDES FOR MR 1.
00004960	600	01		MR
	605	01		1 AN. (NYS.) TRINKAE
	610	01		003 *** *** *** *** ***
	640	01		M. E. FARAN
00005180	005	01		ECU
	010	01		ECUADOR
	015	01		PASTAZA
	025	01		PUYO
	030	01		12 KM W
	050	01		001250
	055	01		09 MAY 1977

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LOCALITY DATA ABOUT TRINKAE COLLECTED IN ECUADOR  
MASTER LIST

DATE: 02/11/80

SERIAL CATEG LINE .....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....

00005180	070	01	YIAU-MIN HUANG
00005190	090	01	23
	120	01	VA'LEY
	165	01	STREAM
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	LARGE
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	ABUNDANT
	275	01	SUBMERGED; EMERGENT
00005196	600	01	MR
	605	01	2 AN. (NYS.) TRINKAE
00006210	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	1.5 KM S
	050	01	000891
	055	01	15 MAY 1977
	070	01	YIAU-MIN HUANG
00006220	090	01	29
	120	01	VALLEY
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	LARGE
	205	01	GROUND POOL
	220	01	TEMPORARY
	225	01	STAGNANT
	235	01	SLIGHTLY
	250	01	FRESH
	270	01	ABUNDANT
	275	01	SUBMERGED; EMERGENT
00006227	600	01	MR
	605	01	3 AN. (NYS.) TRINKAE
00006210	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	1.5 KM S
	050	01	000891
	055	01	15 MAY 1977
	070	01	YIAU-MIN HUANG



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LOCALITY DATA ABOUT TRINKAE COLLECTED IN ECUADOR  
MASTER LIST

DATE: 02/11/80

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00006530	090	01	30
	120	01	VALLEY
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	LARGE
	205	01	GROUND POOL; POND-LIKE GROUND POOL
	220	01	TEMPORARY
	225	01	STAGNANT
	235	01	SLIGHTLY
	250	01	FRESH
	270	01	ABUNDANT
	275	01	SUBMERGED; EMERGENT
00006540	600	01	MR
	605	01	1 AN. (NYS.) TRINKAE
	610	01	001 *** *** *** *** ***
	640	01	M. E. FARAN
00006830	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	4.3 KM E
	050	01	001000
	055	01	17 MAY 1977
	070	01	YIAU-MIN HUANG
00006840	090	01	31
	120	01	VALLEY
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	SCARCE
	275	01	SUBMERGED; EMERGENT
00006846	600	01	MR
	605	01	2 AN. (NYS.) TRINKAE
00007150	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	1.5 KM S
	050	01	000391
	055	01	19 MAY 1977
	070	01	YIAU-MIN HUANG

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LOCALITY DATA ABOUT TRINKAE COLLECTED IN ECUADOR  
MASTER LIST

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SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00007160	090	01	32
	120	01	VALLEY
	136	01	SCRUB
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	MEDIUM
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	PERMANENT
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	ABUNDANT
	275	01	SUBMERGED; EMERGENT
	500	01	IR 107 AND 107 ENTERED IN MR.
00007170	600	01	MR
	605	01	1 AN. (NYS.) TRINKAE
	610	01	012 *** *** 002 002 *** *** ***
	640	01	M. E. FARAN
00007150	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	1.5 KM S
	050	01	000891
	055	01	19 MAY 1977
	070	01	YIAU-MIN HUANG
00007440	090	01	33
	120	01	VALLEY
	136	01	SCRUB
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL; LONG
	205	01	GROUND POOL; WHEEL TRACK
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	SCARCE
	275	01	SUBMERGED; EMERGENT
	285	01	GREEN
	500	01	IR 102 DAMAGED.
00007450	600	01	MR
	605	01	1 AN. (NYS.) TRINKAE
	610	01	001 *** *** *** *** *** ***
	640	01	M. E. FARAN
00007150	005	01	ECU

DATE: 02/11/80

LOCALITY DATA ABOUT TRINKAE COLLECTED IN ECUADOR  
MASTER LIST

PAGE NO: 10

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00007150	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	1.5 KM S
	050	01	000891
	055	01	19 MAY 1977
	070	01	YIAU-MIN HUANG
00009320	090	01	34
	120	01	VALLEY
	136	01	SCRUB
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL; LONG
	205	01	GROUND POOL; WHEEL TRACK
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	SCARCE
	275	01	SUBMERGED; EMERGENT
00009328	600	01	MR
	605	01	4 AN. (NYS.) TRINKAE
00012490	005	01	ECU
	010	01	ECUADOR
	015	01	NAPO
	025	01	TENA
	030	01	11.7 KM SW
	055	01	25 MAY 1977
	070	01	YIAU-MIN HUANG
00012500	090	01	40
	120	01	VALLEY
	136	01	SCRUB
	160	01	ALONG ROAD
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	LARGE
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	235	01	COLOR
	250	01	FRESH
	270	01	ABUNDANT
	275	01	SUBMERGED; EMERGENT
00012514	600	01	MR
	605	01	5 AN. (NYS.) TRINKAE

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LOCALITY DATA ABOUT TRINKAE COLLECTED IN ECUADOR  
MASTER LIST

DATE: 02/11/80

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00013390	005	01	ECU
	010	01	ECUADOR
	015	01	NAPO
	025	01	TENA
	030	01	13 KM SW
	050	01	001000
	055	01	25 MAY 1977
	070	01	YIAU-MIN HUANG
00013870	090	01	43
	120	01	VALLEY
	136	01	SCRUB
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL; LONG
	205	01	GROUND POOL; WHEEL TRACK
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	SCARCE
	275	01	SUBMERGED; EMERGENT
	285	01	GREEN
000135/2	600	01	MR
	605	01	2 AN. (NYS.) TRINKAE

## LOCALITY DATA ABOUT TRINXAE COLLECTED IN ECUADOR

## SELGEM MASTER LIST TOTALS:

NUMBER OF LINES PRINTED = 0000477 - NUMBER OF RECORDS PRINTED = 0000060  
NUMBER OF LINES PROCESSED = 0000477 - NUMBER OF RECORDS PROCESSED = 0000060

DATE: 02/08/80

TRINKAE COLLECTED IN GROUND POOLS  
MASTER LIST

PAGE NO: 1

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....	Has An. (Nys.) trinkae ever been collected in ground pools? Where?
00001090	005	01	ECU	
	010	01	ECUADOR	
	015	01	PASTAZA	
	025	01	PUYO	
	030	01	39 KM N	
	050	01	001750	
	055	01	06 MAY 1977	
	070	01	YIAU-MIN HUANG	
00001100	090	01	9	
	120	01	VALLEY	
	136	01	SCRUB	
	160	01	ALONG ROAD	
	170	01	DISTANCE FROM NEAREST HOME 100-999 M	
	200	01	SMALL	
	205	01	POND; LAKE; GROUND POOL	
	210	01	PARTIAL SHADE	
	220	01	TEMPORARY	
	225	01	STAGNANT	
	235	01	COLOR	
	250	01	FRESH	
	275	01	SUBMERGED; EMERGENT	
	285	01	GREEN	
	500	01	IR 112a ENTERED AS 112.	
00001110	600	01	MR	
	605	01	1 AN. (NYS.) TRINKAE	
	610	01	*** 001 001 *** *** *** ***	
	640	01	M. E. FARAN	
00001360	005	01	ECU	
	010	01	ECUADOR	
	015	01	PASTAZA	
	025	01	PUYO	
	030	01	4 KM NE	
	050	01	001250	
	055	01	07 MAY 1977	
	070	01	YIAU-MIN HUANG	
00001680	090	01	11	
	120	01	VALLEY	
	160	01	ALONG ROAD	
	170	01	PLANTATION; SUGARCANE; DISTANCE FROM NEAREST HOME 100-999 M	
	200	01	SMALL	
	205	01	GROUND POOL	
	210	01	FULL SUN	
	220	01	TEMPORARY	
	225	01	STAGNANT	
	230	01	CLEAR	

DATE: 02/08/80

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TRINKAE COLLECTED IN GROUND POOLS  
MASTER LIST

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00001680	250	01	FRESH
	275	01	SUBMERGED; EMERGENT
	285	01	GREEN; BROWN
	290	01	SCARCE
	500	01	TWO WHOLE MOUNTED ADULTS INCLUDED IN MR 4.
00001690	600	01	MR
	605	01	1 AN. (NYS.) TRINKAE
	610	01	002 001 001 *** *** *** ***
	640	01	M. E. FARAN
00002830	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	16 KM NE
	050	01	001000
	055	01	07 MAY 1977
	070	01	YIAU-MIN HUANG
00002840	090	01	15
	120	01	VALLEY
	136	01	SCRUB
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	235	01	COLOR
	250	01	FRESH
	275	01	SUBMERGED; EMERGENT
	285	01	GREEN; BROWN
	290	01	SCARCE
	500	01	IR 100a AND b ENTERED AS MR 1.
00002846	600	01	MR
	605	01	2 AN. (NYS.) TRINKAE
00002830	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	16 KM NE
	050	01	001000
	055	01	07 MAY 1977
	070	01	YIAU-MIN HUANG
00002950	090	01	16
	120	01	VALLEY
	165	01	STREAM

DATE: 02/08/80

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TRINKAE COLLECTED IN GROUND POOLS  
MASTER LIST

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00002950	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	TURBID; MUDDY
	250	01	FRESH
	270	01	SCARCE
	500	01	IR 105 WITH BROKEN VIAL FOR P.
00002956	600	01	MR
	605	01	2 AN. (NYS.) TRINKAE
00003250	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	045	01	01 28 --S. 077 59 --W
	050	01	000953
	055	01	08 MAY 1977
	070	01	YIAU-MIN HUANG
00003260	090	01	17
	120	01	VALLEY
	136	01	SCRUB
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL; LONG
	205	01	GROUND POOL; WHEEL TRACK
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	275	01	SUBMERGED; EMERGENT
00003271	600	01	MR
	605	01	2 AN. (NYS.) TRINKAE
00003250	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	045	01	01 28 --S. 077 59 --W
	050	01	000953
	055	01	08 MAY 1977
	070	01	YIAU-MIN HUANG
00003770	090	01	18
	120	01	VALLEY
	160	01	ALONG ROAD



DATE: 02/08/80

TRINKAE COLLECTED IN GROUND POOLS  
MASTER LIST

PAGE NO: 4

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00003770	165	01	STREAM
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	LARGE
	205	01	GROUND POOL; POND-LIKE
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	235	01	COLOR
	250	01	FRESH
	275	01	SUBMERGED; EMERGENT
	285	01	GREEN
00003801	600	01	MR
	605	01	4 AN. (NYS.) TRINKAE
00005180	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	12 KM W
	050	01	001250
	055	01	09 MAY 1977
	070	01	YIAU-MIN HUANG
00005190	090	01	23
	120	01	VALLEY
	165	01	STREAM
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	LARGE
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	ABUNDANT
	275	01	SUBMERGED; EMERGENT
00005196	600	01	MR
	605	01	2 AN. (NYS.) TRINKAE
00006210	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	1.5 KM S
	050	01	003891
	055	01	15 MAY 1977
	070	01	YIAU-MIN HUANG
00006220	090	01	29

DATE: 02/08/80

TRINKAE COLLECTED IN GROUND POOLS  
MASTER LIST

PAGE NO: 5

SERIAL	CATEG LINE	.....2....V....3....V....4....V....5....V....6....V....7....V....
00006220	120 01	VALLEY
	170 01	DISTANCE FROM NEAREST HOME 100-999 M
	200 01	LARGE
	205 01	GROUND POOL
	220 01	TEMPORARY
	225 01	STAGNANT
	235 01	SLIGHTLY
	250 01	FRESH
	270 01	ABUNDANT
	275 01	SUBMERGED; EMERGENT
00006227	600 01	MR
	605 01	3 AN. (NYS.) TRINKAE
00006210	005 01	ECU
	010 01	ECUADOR
	015 01	PASTAZA
	025 01	PUYO
	030 01	1.5 KM S
	050 01	000891
	055 01	15 MAY 1977
	070 01	YIAU-MIN HUANG
00006530	090 01	30
	120 01	VALLEY
	170 01	DISTANCE FROM NEAREST HOME 100-999 M
	200 01	LARGE
	205 01	GROUND POOL; POND-LIKE GROUND POOL
	220 01	TEMPORARY
	225 01	STAGNANT
	235 01	SLIGHTLY
	250 01	FRESH
	270 01	ABUNDANT
	275 01	SUBMERGED; EMERGENT
00006540	600 01	MR
	605 01	1 AN. (NYS.) TRINKAE
	610 01	001 *** *** *** *** *** ***
	640 01	M. E. FARAN
00006830	005 01	ECU
	010 01	ECUADOR
	015 01	PASTAZA
	025 01	PUYO
	030 01	4.3 KM E
	050 01	001000
	055 01	17 MAY 1977
	070 01	YIAU-MIN HUANG
00006840	090 01	31
	120 01	VALLEY

DATE: 02/08/80

TRINKAE COLLECTED IN GROUND POOLS  
MASTER LIST

PAGE NO: 6

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00006940	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	SCARCE
	275	01	SUBMERGED; EMERGENT
00006946	600	01	MR
	605	01	2 AN. (NYS.) TRINKAE
00007150	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	1.5 KM S
	050	01	000891
	055	01	19 MAY 1977
	070	01	YIAU-MIN HUANG
00007160	090	01	32
	120	01	VALLEY
	136	01	SCRUB
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	MEDIUM
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	PERMANENT
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	ABUNDANT
	275	01	SUBMERGED; EMERGENT
	500	01	IR 107 AND 107 ENTERED IN MR.
00007170	600	01	MR
	605	01	1 AN. (NYS.) TRINKAE
	610	01	012 *** ** 002 002 *** ** *
	640	01	M. E. FARAN
00007150	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	1.5 KM S
	050	01	000891
	055	01	19 MAY 1977
	070	01	YIAU-MIN HUANG

DATE: 02/08/80

TRINKAE COLLECTED IN GROUND POOLS  
MASTER LIST

PAGE NO: 7

SERIAL CATEG LINE .....2....V....3....V....4....V....5....V....6....V....7....V.....

00007440	090	01	33	VALLEY
	120	01		SCRUB
	136	01		DISTANCE FROM NEAREST HOME 100-999 M
	170	01		SMALL; LONG
	200	01		GROUND POOL; WHEEL TRACK
	205	01		FULL SUN
	210	01		TEMPORARY
	225	01		STAGNANT
	230	01		CLEAR
	250	01		FRESH
	270	01		SCARCE
	275	01		SUBMERGED; EMERGENT
	285	01		GREEN
	500	01		IR 102 DAMAGED.
00007450	600	01		MR
	605	01		1 AN. (NYS.) TRINKAE
	610	01		001 *** *** *** *** ***
	640	01		M. E. FARAN
00007150	005	01		ECU
	010	01		ECUADOR
	015	01		PASTAZA
	025	01		PUYO
	030	01		1.5 KM S
	050	01		000891
	055	01		19 MAY 1977
	070	01		YIAU-MIN HUANG
00009320	090	01	34	VALLEY
	120	01		SCRUB
	136	01		DISTANCE FROM NEAREST HOME 100-999 M
	170	01		SMALL; LONG
	200	01		GROUND POOL; WHEEL TRACK
	205	01		FULL SUN
	210	01		TEMPORARY
	225	01		STAGNANT
	230	01		CLEAR
	250	01		FRESH
	270	01		SCARCE
	275	01		SUBMERGED; EMERGENT
00009328	600	01		MR
	605	01		4 AN. (NYS.) TRINKAE
00012490	005	01		ECU
	010	01		ECUADOR
	015	01		NAPO
	025	01		TENA

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TRINKAE COLLECTED IN GROUND POOLS  
MASTER LIST

DATE: 02/03/80

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00012490	030	01	11.7 KM SW
	055	01	25 MAY 1977
	070	01	YIAU-MIN HUANG
00012500	030	01	40
	120	01	VALLEY
	136	01	SCRUB
	160	01	ALONG ROAD
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	LARGE
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	235	01	COLORLED
	250	01	FRESH
	270	01	ADUNDANT
	275	01	SUMMERGED; EMERGENT
00012514	600	01	MR
	605	01	5 AN. (NYS.) TRINKAE
00013390	005	01	ECU
	010	01	ECJADOR
	015	01	NAPO
	025	01	TENA
	030	01	13 KM SW
	050	01	001000
	055	01	25 MAY 1977
	070	01	YIAU-MIN HUANG
00013870	090	01	43
	120	01	VALLEY
	136	01	SCRUB
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL; LONG
	205	01	GROUND POOL; WHEEL TRACK
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	SCARCE
	275	01	SUMMERGED; EMERGENT
	285	01	GREEN
00013872	600	01	MR
	605	01	2 AN. (NYS.) TRINKAE

## TRINKAE COLLECTED IN GROUND POOLS

## SELGEM MASTER LIST TOTALS:

NUMBER OF LINES PRINTED	= 0000360	- NUMBER OF RECORDS PRINTED	= 0000045
NUMBER OF LINES PROCESSED	= 0000360	- NUMBER OF RECORDS PROCESSED	= 0000045

DATE: 02/14/80

INDIVIDUAL REARINGS OF TRINKAE (L-P-F AND L-P-M)  
MASTER LIST

PAGE NO: 1

SERIAL CATEG LINE .....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....

How many larval-pupal-female and larval-pupal-male  
individual rearings are there of An. (Nys.) trinkae  
from Ecuador?

00000260	600	01	IR	001 AN. (NYS.) TRINKAE
	605	01	X X X *	X
	610	01		
00000380	600	01	IR	001 AN. (NYS.) TRINKAE
	605	01	X X X *	X
	610	01		
00000990	600	01	IR	002 AN. (NYS.) TRINKAE
	605	01	X X X *	X
	610	01		
00001340	600	01	IR	009 AN. (NYS.) TRINKAE
	605	01	X X X *	X
	610	01		
00001760	600	01	IR	001 AN. (NYS.) TRINKAE
	605	01	X X X *	X
	610	01		
00001800	600	01	IR	003 AN. (NYS.) TRINKAE
	605	01	X X X *	X
	610	01		
00002890	600	01	IR	003 AN. (NYS.) TRINKAE
	605	01	X X X *	X
	610	01		
00002920	600	01	IR	006 AN. (NYS.) TRINKAE
	605	01	X X X *	X
	610	01		
00003160	600	01	IR	002 AN. (NYS.) TRINKAE
	605	01	X X X *	X
	610	01		
00003170	600	01	IR	003 AN. (NYS.) TRINKAE
	605	01	X X X *	X
	610	01		
00003220	600	01	IR	007 AN. (NYS.) TRINKAE
	605	01	X X X *	X
	610	01		
00003420	600	01	IR	001 AN. (NYS.) TRINKAE
	605	01	X X X *	X
	610	01		
00003650	600	01	IR	

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INDIVIDUAL REARINGS OF TRINKAE (L-P-F AND L-P-M)  
MASTER LIST

DATE: 02/14/80

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00003650	605	01	007 AN. (NYS.) TRINKAE
	610	01	X X * X *
00003750	600	01	IR
	605	01	010 AN. (NYS.) TRINKAE
	610	01	X X * X *
00004050	600	01	IR
	605	01	002 AN. (NYS.) TRINKAE
	610	01	X X * X *
00006320	600	01	IR
	605	01	002 AN. (NYS.) TRINKAE
	610	01	X X * X *
00008370	600	01	IR
	605	01	004 AN. (NYS.) TRINKAE
	610	01	X X * X *
00006410	600	01	IR
	605	01	006 AN. (NYS.) TRINKAE
	610	01	X X * X *
00006450	600	01	IR
	605	01	007 AN. (NYS.) TRINKAE
	610	01	X X * X *
00006470	600	01	IR
	605	01	009 AN. (NYS.) TRINKAE
	610	01	X X * X *
00006490	600	01	IR
	605	01	011 AN. (NYS.) TRINKAE
	610	01	X X * X *
00006500	600	01	IR
	605	01	012 AN. (NYS.) TRINKAE
	610	01	X X * X *
00006510	600	01	IR
	605	01	013 AN. (NYS.) TRINKAE
	610	01	X X * X *
00006520	600	01	IR
	605	01	014 AN. (NYS.) TRINKAE
	610	01	X X * X *
00006650	600	01	IR
	605	01	001 AN. (NYS.) TRINKAE
	610	01	X X * X *



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INDIVIDUAL REARINGS OF TRINKAE (L-P-F AND L-P-M)  
MASTER LIST

DATE: 02/14/80

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00006720	600	01	IR
	605	01	004 AN. (NYS.) TRINKAE
	610	01	X X X * X
00006730	600	01	IR
	605	01	005 AN. (NYS.) TRINKAE
	610	01	X X X * *
00006780	600	01	IR
	605	01	007 AN. (NYS.) TRINKAE
	610	01	X X X * *
00006790	600	01	IR
	605	01	008 AN. (NYS.) TRINKAE
	610	01	X X X * *
00006800	600	01	IR
	605	01	009 AN. (NYS.) TRINKAE
	610	01	X X X * *
00006810	600	01	IR
	605	01	010 AN. (NYS.) TRINKAE
	610	01	X X X * *
00006820	600	01	IR
	605	01	011 AN. (NYS.) TRINKAE
	610	01	X X X * *
00006860	600	01	IR
	605	01	001 AN. (NYS.) TRINKAE
	610	01	X X X * *
00006910	600	01	IR
	605	01	002 AN. (NYS.) TRINKAE
	610	01	X X X * *
00006920	600	01	IR
	605	01	003 AN. (NYS.) TRINKAE
	610	01	X X X * *
00007020	600	01	IR
	605	01	008 AN. (NYS.) TRINKAE
	610	01	X X X * *
00007030	600	01	IR
	605	01	009 AN. (NYS.) TRINKAE
	610	01	X X X * *
00007120	600	01	IR
	605	01	013 AN. (NYS.) TRINKAE
	610	01	X X X * *

DATE: 02/14/80

INDIVIDUAL REARINGS OF TRINKAE (L-P-F AND L-P-M)  
MASTER LIST

PAGE NO: 4

SERIAL CATEG LINE .....2....V....3....V....4....V....5....V....6....V....7....V.....

00007260 600 01 IR 001 AN. (NYS.) TRINKAE  
605 01 X X X \*  
610 01 X X X \*

00007270 600 01 IR 002 AN. (NYS.) TRINKAE  
605 01 X X X \*  
610 01 X X X \*

00007290 600 01 IR 003 AN. (NYS.) TRINKAE  
605 01 X X X \*  
610 01 X X X \*

00007300 600 01 IR 004 AN. (NYS.) TRINKAE  
605 01 X X X \*  
610 01 X X X \*

00007310 600 01 IR 005 AN. (NYS.) TRINKAE  
605 01 X X X \*  
610 01 X X X \*

00007340 600 01 IR 007 AN. (NYS.) TRINKAE  
605 01 X X X \*  
610 01 X X X \*

00007370 600 01 IR 111 AN. (NYS.) TRINKAE  
605 01 X X X \*  
610 01 X X X \*

00007390 600 01 IR 008 AN. (NYS.) TRINKAE  
605 01 X X X \*  
610 01 X X X \*

00007400 600 01 IR 009 AN. (NYS.) TRINKAE  
605 01 X X X \*  
610 01 X X X \*

00007420 600 01 IR 010 AN. (NYS.) TRINKAE  
605 01 X X X \*  
610 01 X X X \*

00012750 600 01 IR 003 AN. (NYS.) TRINKAE  
605 01 X X X \*  
610 01 X X X \*

00012780 600 01 IR 005 AN. (NYS.) TRINKAE  
605 01 X X X \*  
610 01 X X X \*

00012790 600 01 IR 007 AN. (NYS.) TRINKAE  
605 01 X X X \*  
610 01 X X X \*

PAGE NO: 5

INDIVIDUAL REARINGS OF TRINKAE (L-P-F AND L-P-M)  
MASTER LIST

DATE: 02/14/83

SERIAL CATEG LINE .....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....

00013110 600 01 IR 011 AN. (NYS.) TRINKAE  
605 01 X X X \*  
610 01

## INDIVIDUAL READINGS OF TRINKAE (L-P-F AND L-P-M)

## SELGEN MASTER LIST TOTALS:

NUMBER OF LINES PRINTED = 0000156 - NUMBER OF RECORDS PRINTED = 0000052  
NUMBER OF LINES PROCESSED = 0000156 - NUMBER OF RECORDS PROCESSED = 0000052

PAGE 1

TOTAL L-P-F AND L-F-M  
QUERY REPORT  
02/12/80

SERIAL CATEG LINE TRN DATA-----

LARVAL-PUPAL-FEMALE 27.

LARVAL-PUPAL-MALE 25.

RECORDS READ - 000112

END OF SELECT

DATE: 02/05/50

MONTHS OF THE YEAR RANGELI WAS COLLECTED IN ECUADOR  
MASTER LIST

PAGE NO: 1

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....	What months of the year has An. (Nys.) rangeli been collected in Ecuador?
00001090	035	01	ECU	
	010	01	ECUADOR	
	015	01	PASTAZA	
	025	01	PUYO	
	030	01	39 KM N	
	035	01	001750	
	055	01	06 MAY 1977	
	070	01	YIAU-MIN HUANG	
00001100	020	01	9	
	120	01	VALLEY	
	136	01	SCRUB	
	160	01	ALONG ROAD	
	170	01	DISTANCE FROM NEAREST HOME 100-999 M	
	200	01	SMALL	
	205	01	POND; LAKE; GROUND POOL	
	210	01	PARTIAL SHADE	
	220	01	TEMPORARY	
	225	01	STAGNANT	
	235	01	COLOR	
	250	01	FRESH	
	275	01	SUBMERGED; EMERGENT	
	285	01	GREEN	
	500	01	IR 112a ENTERED AS 112.	
00001121	600	01	MR	
	605	01	3 AN. (NYS.) RANGELI	
00001360	005	01	ECU	
	010	01	ECUADOR	
	015	01	PASTAZA	
	025	01	PUYO	
	030	01	4 KM NE	
	050	01	001250	
	055	01	07 MAY 1977	
	070	01	YIAU-MIN HUANG	
00001370	090	01	10	
	120	01	VALLEY	
	160	01	ALONG ROAD	
	170	01	PLANTATION; SUGARCANE; DISTANCE FROM NEAREST HOME 100-999 M	
	200	01	SMALL	
	205	01	GROUND POOL	
	210	01	FULL SUN	
	220	01	TEMPORARY	
	225	01	STAGNANT	
	230	01	CLEAR	
	250	01	FRESH	
	275	01	SUBMERGED; EMERGENT	

PAGE NO: 2

MONTHS OF THE YEAR RANGELI WAS COLLECTED IN ECUADOR  
MASTER LIST

DATE: 02/08/80

.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....

SERIAL	CATEG	LINE	DESCRIPTION
00001370	230	01	SCARCE
	500	01	IR 121a AND b ENTERED IN
00001402	600	01	MR
	605	01	5 AN. (NYS.) RANGELI
00001980	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	5.3 KM NE
	050	01	001250
	055	01	07 MAY 1977
	070	01	YIAU-MIN HUANG
00002050	090	01	14
	120	01	VALLEY
	136	01	SCRUB
	160	01	ALONG ROAD
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	275	01	SUBMERGED; EMERGENT
	290	01	SCARCE
	500	01	IR 141 DAMAGED.
		02	IR 154a, c, AND e RECORDED IN MR 2.
		03	IR 154b AND d RECORDED IN MR 5 AND 6.
00002084	600	01	MR
	605	01	5 AN. (NYS.) RANGELI
	610	01	*** 002 *** 001 *** 001 *** ***
	640	01	M. E. FARAN
00002630	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	13 KM NE
	050	01	001000
	055	01	07 MAY 1977
	070	01	YIAU-MIN HUANG
00002840	090	01	15
	120	01	VALLEY
	136	01	SCRUB
	170	01	DISTANCE FROM NEAREST HOME 100-999 M

DATE: 02/03/80

MONTHS OF THE YEAR RANGELI WAS COLLECTED IN ECUADOR  
MASTER LIST

PAGE NO: 3

SERIAL CATEG LINE .....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....

00002840	200	01	SMALL
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	235	01	COLORS
	250	01	FRESH
	275	01	SUBMERGED; EMERGENT
	285	01	GREEN; BROWN
	290	01	SCARCE
	500	01	IR 100a AND b ENTERED AS MR 1.
00002847	600	01	MR
	605	01	3 AN. (NYS.) RANGELI
00005540	035	01	ECU
	010	01	ECUADOR
	015	01	NAPO
	025	01	TENA
	030	01	1.5 KM S
	050	01	000510
	055	01	13 MAY 1977
	070	01	YIAU-MIN HUANG
00005550	090	01	26
	120	01	VALLEY
	145	01	WATER HYACINTH; EICHORNIA
	200	01	MEDIUM
	205	01	POND; LAKE
	210	01	FULL SUN
	220	01	PERMANENT
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	ABUNDANT
	275	01	SUBMERGED; EMERGENT
	500	01	IR 109a ENTERED AS 109.
00005555	600	01	MR
	605	01	1 AN. (NYS.) RANGELI
	610	01	001 *** *** *** *** *** ***
	640	01	N. E. FARAN
00005820	005	01	ECU
	010	01	ECUADOR
	015	01	NAPO
	025	01	TENA
	030	01	32 KM S
	050	01	000700
	055	01	13 MAY 1977
	070	01	YIAU-MIN HUANG



DATE: 02/09/80

MONTHS OF THE YEAR RANGELI WAS COLLECTED IN ECUADOR  
MASTER LIST

PAGE NO: 4

SERIAL CATEG LINE .....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....

00005830 090 01 27  
120 01 VALLEY  
150 01 ALONG ROAD  
200 01 LARGE  
205 01 GROUND POOL; POND-LIKE GROUND POOL  
210 01 FULL SUN  
220 01 TEMPORARY  
225 01 STAGNANT  
230 01 CLEAR  
250 01 FRESH  
270 01 SCARCE  
275 01 SUBMERGED; EMERGENT  
500 01 IR 105 RECORDED AS MR 1.

00005836 600 01 MR  
605 01 2 AN. (NYS.) RANGELI

00007150 005 01 ECU  
010 01 ECUADOR  
015 01 PASTAZA  
025 01 PUJO  
030 01 1.5 KM S  
050 01 000891  
055 01 19 MAY 1977  
070 01 YIAU-MIN HUANG

00007160 090 01 32  
120 01 VALLEY  
136 01 SCRUB  
170 01 DISTANCE FROM NEAREST HOME 100-999 M  
200 01 MEDIUM  
205 01 GROUND POOL  
210 01 FULL SUN  
220 01 PERMANENT  
225 01 STAGNANT  
230 01 CLEAR  
250 01 FRESH  
270 01 ABJNDANT  
275 01 SUBMERGED; EMERGENT  
500 01 IR 107 AND 107 ENTERED IN MR.

00007180 600 01 MR  
605 01 2 AN. (NYS.) RANGELI  
610 01 C01 \*\*\* \*\*\* \*\*\* \*\*\* \*\*\*  
640 01 M. E. FARAN

00007150 005 01 ECU  
010 01 ECUADOR  
015 01 PASTAZA  
025 01 PUJO  
030 01 1.5 KM S

MONTHS OF THE YEAR RANGE.I WAS COLLECTED IN ECUADOR  
MASTER LIST

**DATE: 02/08/80**

SERIAL	CATEG LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

00007150	050	01	000891
	055	01	19 MAY 1977
	070	01	YIAU-MIN HUANG

000	01	34
020	01	VALLEY
030	01	SCRUB
156	01	DISTANCE FROM NEAREST HOME
170	01	SMALL: LONG
200	01	GROUND POOL: WHEEL TRACK
205	01	FULL SUN
210	01	TEMPORARY
220	01	STAGNANT
225	01	CLEAR
230	01	FRESH
250	01	SCARCE
270	01	SUBMERGED: EMERGENT

00009327 606 01 MR 3 AN. (NYS.) RANGELI

00010180	005 01	ECU
	010 01	ECUADOR
	015 01	PASTAZA
	025 01	PUYO
	030 01	23 KM SE
	050 01	000770
	055 01	19 MAY 1977
	070 01	YTAU-MIN HUANG

00010190	090	01	35
	120	01	VALLEY
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	LARGE
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	MUDDY
	230	01	FRESH
	270	01	SCARCE
	275	01	SUBMERGED; EMERGENT

0001C193 600 01 MR 3 AN. (NYS.) RANGELI

00010580	005	01	ECU
	010	01	ECUADOR
	015	01	NAPO
	025	01	YENIA
	030	01	12.5 KM SE

DATE: 02/06/80

PAGE NO: 6

MONTHS OF THE YEAR RANGELI WAS COLLECTED IN ECUADOR  
MASTER LIST

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00010580	050	01	000400
	055	01	24 MAY 1977
	070	01	YIAU-MIN HUANG
00011120	090	01	38
	120	01	VALLEY
	136	01	SCRUB
	170	01	DISTANCE FROM NEAREST HOME 10-99 M
	200	01	SMALL; LONG
	205	01	GROUND POOL
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	ABUNDANT
	275	01	SUBMERGED; EMERGENT
	500	01	IR 155a, b, AND d RECORDED IN MR 1.
00011131	600	01	MR
	605	01	2 AN. (NYS.) RANGELI
00012490	005	01	ECU
	010	01	ECUADOR
	015	01	NAPO
	025	01	TENA
	030	01	11.7 KM SW
	055	01	25 MAY 1977
	070	01	YIAU-MIN HUANG
00012500	090	01	40
	120	01	VALLEY
	136	01	SCRUB
	160	01	ALONG ROAD
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	LARGE
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	235	01	COLOR
	250	01	FRESH
	270	01	ABUNDANT
	275	01	SUBMERGED; EMERGENT
00012511	600	01	MR
	605	01	2 AN. (NYS.) RANGELI
00012490	005	01	ECU
	010	01	ECUADOR
	015	01	NAPO
	025	01	TENA

DATE: 02/08/80 MONTHS OF THE YEAR RANGELI WAS COLLECTED IN ECUADOR PAGE NO: 7  
MASTER LIST

SERIAL	CATEG LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00012490	030 01	11.7 KM SW
	055 01	25 MAY 1977
	070 01	YIAU-MIN HUANG
00013130	090 01	41
	120 01	VALLEY
	130 01	SCRUB
	160 01	ALONG ROAD
	170 01	DISTANCE FROM NEAREST HOME 100-999 M
	200 01	MEDIUM: LONG
	205 01	GROUND POOL
	210 01	FULL SUN
	220 01	TEMPORARY
	225 01	STAGNANT
	235 01	COLOR
	250 01	FRESH
	270 01	ABUNDANT
	275 01	SUBMERGED; EMERGENT
	285 01	GREEN; BROWN
00013133	600 01	MR
	605 01	3 AN. (NYS.) RANGELI
00013990	005 01	ECU
	010 01	ECUADOR
	015 01	NAPO
	025 01	TENA
	030 01	1.5 KM S
	050 01	000510
	055 01	27 MAY 1977
	070 01	YIAU-MIN HUANG
00014000	090 01	44
	120 01	VALLEY
	145 01	WATER HYACINTH; EICHORNIA
	170 01	DISTANCE FROM NEAREST HOME 10-99 M
	200 01	MEDIUM
	205 01	POND; LAKE
	210 01	FULL SUN
	220 01	PERMANENT
	225 01	STAGNANT
	230 01	CLEAR
	250 01	FRESH
	270 01	ABUNDANT
	275 01	SUBMERGED; EMERGENT
	280 01	WATER HYACINTH; EICHORNIA
00014012	600 01	MR
	605 01	3 AN. (NYS.) RANGELI
00014370	005 01	ECU

PAGE NO: 8

MONTHS OF THE YEAR RANGELI WAS COLLECTED IN ECUADOR  
MASTER LIST

DATE: 02/08/80

SERIAL CATEG LINE .....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....

00014370 010 01 ECUADOR  
015 01 NAPO  
035 01 TENA  
030 01 1 KM S  
050 01 000510  
055 01 28 MAY 1977  
070 01 YIAU-MIN HUANG

00014380 090 01 45  
120 01 VALLEY  
170 01 DISTANCE FROM NEAREST HOME 10-99 M  
200 01 SMALL  
205 01 POND; LAKE  
210 01 FULL SUN  
220 01 TEMPORARY  
225 01 STAGNANT  
235 01 COLORED  
250 01 FRESH  
270 01 SCARCE  
275 01 SUBMERGED; EMERGENT

00014382 600 01 MR  
605 01 2 AN. (NYS.) RANGELI

00019230 005 01 ECU  
010 01 ECUADOR  
015 01 NAPO  
025 01 LIMONCOCHA  
055 01 08 JUN 1977  
070 01 YIAU-MIN HUANG

00019880 090 01 57  
120 01 VALLEY  
170 01 DISTANCE FROM NEAREST HOME 10-99 M  
200 01 LARGE; SHALLOW; POND-LIKE  
205 01 GROUND POOL  
210 01 PARTIAL SHADE  
220 01 TEMPORARY  
225 01 STAGNANT  
230 01 CLEAR  
250 01 FRESH  
270 01 ABUNDANT  
275 01 SUBMERGED; EMERGENT  
500 01 1R 108a RECORDED AS MR 1.

00015890 600 01 MR  
605 01 1 AN. (NYS.) RANGELI  
610 01 \*\*\* 002 \*\*\* 001 001 \*\*\* \*\*\*  
640 01 M. E. FARAN

## MONTHS OF THE YEAR RANGELI WAS COLLECTED IN ECUADOR

## SELGEM MASTER LIST TOTALS:

NUMBER OF LINES PRINTED = 0000361 - NUMBER OF RECORDS PRINTED = 0000045

NUMBER OF LINES PROCESSED = 0000361 - NUMBER OF RECORDS PROCESSED = 0000045

DATE: 02/07/80

TRINKAE COLLECTED ABOVE 250 M IN ECUADOR  
MASTER LIST

PAGE NO: 1

SERIAL CATEG LINE SERIAL CATEG LINE

00000010 005 01 ECU 00000110 090 01 SCRUB 4

010 01 ECUADOR 136 01 ALONG ROAD: NOT MAIN ROAD

015 01 PASTAZA 160 01 DISTANCE FROM NEAREST HOME 100-999 M

025 01 PUYO 170 01 LARGE

045 01 01 28 --S. 377 59 --W 205 01 POND: LAKE

050 01 000953 210 01 FULL SUN

055 01 05 MAY 1977 220 01 TEMPORARY

070 01 YIAU-MIN HUANG 250 01 FRESH

275 01 SUBMERGED: EMERGENT

285 01 GREEN

00000120 600 01 MR 1 AN. (NYS.) TRINKAE

605 01 001 001 \*\*\* \*\*\* \*\*\* \*\*\*

610 01 M. E. FARAN

640 01

00000010 005 01 ECU 00000200 090 01 SCRUB 5

010 01 ECUADOR 136 01 STREAM

015 01 PASTAZA 165 01 DISTANCE FROM NEAREST HOME 100-999 M

025 01 PUYO 170 01 SMALL

045 01 01 28 --S. 377 59 --W 205 01 STREAM POOL

050 01 000953 210 01 FULL SUN

055 01 05 MAY 1977 220 01 TEMPORARY

070 01 YIAU-MIN HUANG 230 01 CLEAR

250 01 FRESH

270 01 SUBMERGED

500 01 2 ANOPHELES LARVAE DIED.

00000210 600 01 MR

Has An. (Nys.) trinkae been collected above 250 M elevation in Ecuador? Where?

PAGE NO: 2

TRINKAE COLLECTED ABOVE 250 M IN ECUADOR  
MASTER LIST

DATE: 02/07/80

SERIAL CATEG LINE .....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....

00000210 605 01 1 AN. (NYS.) TRINKAE  
610 01 002 \*\*\* \*\*\* \*\*\* \*\*\* \*\*\*  
640 01 M. E. FARAN

00000010 005 01 ECU  
010 01 ECUADOR  
015 01 PASTAZA  
025 01 PUYO  
045 01 01 28 --S. 077 59 --W  
050 01 000953  
055 01 05 MAY 1977  
070 01 YIAU-MIN HUANG

00000220 090 01 6  
136 01 SCRUB  
170 01 DISTANCE FROM NEAREST HOME 100-999 M  
200 01 SMALL: LONG  
205 01 STREAM POOL  
210 01 FULL SUN  
220 01 TEMPORARY  
230 01 CLEAR  
250 01 FRESH  
280 01 SUBMERGED: FLOATING: EMERGENT  
285 01 GREEN  
500 01 IR 100a AND 100b ENTERED AS 100 AND 101. IR 100b WITH 2 1.

00000233 600 01 MR  
605 01 4 AN. (NYS.) TRINKAE

00000280 005 01 ECU  
010 01 ECUADOR  
015 01 PASTAZA  
025 01 PUYO  
030 01 20 KM N  
050 01 001000  
055 01 06 MAY 1977  
C70 01 YIAU-MIN HUANG

00000290 090 01 8  
120 01 VALLEY  
136 01 SCRUB  
170 01 DISTANCE FROM NEAREST HOME 10-99 M  
200 01 LARGE  
205 01 POND  
210 01 FULL SUN  
220 01 PERMANENT  
225 01 SLOW  
235 01 SLIGHTLY  
250 01 FRESH  
275 01 SUBMERGED: FLOATING: EMERGENT  
285 01 BROWN



PAGE NO: 3

TRINKAE COLLECTED ABOVE 250 M IN ECUADOR  
MASTER LIST

DATE: 02/07/80

SERIAL	CATEG LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00000290	290 01	SCARCE
	500 01	IR 163a. b. AND c ENTERED IN MR.
00000322	600 01	MR
	635 01	5 AN. (NYS.) TRINKAE
00001090	005 01	ECU
	010 01	ECUADOR
	015 01	PASTAZA
	025 01	PUYO
	030 01	39 KM N
	050 01	001750
	055 01	06 MAY 1977
	070 01	YIAU-MIN HUANG
00001100	090 01	9
	120 01	VALLEY
	136 01	SCRUB
	160 01	ALONG ROAD
	170 01	DISTANCE FROM NEAREST HOME 100-999 M
	200 01	SMALL
	205 01	POND; LAKE; GROUND POOL
	210 01	PARTIAL SHADE
	220 01	TEMPORARY
	225 01	STAGNANT
	235 01	COLORS
	250 01	FRESH
	275 01	SUBMERGED; EMERGENT
	285 01	GREEN
	500 01	IR 112a ENTERED AS 112.
00001110	600 01	MR
	605 01	1 AN. (NYS.) TRINKAE
	610 01	*** 001 001 *** *** *** ***
	640 01	M. E. FARAN
00001380	005 01	ECU
	010 01	ECUADOR
	015 01	PASTAZA
	025 01	PUYO
	030 01	4 KM NE
	050 01	001250
	055 01	07 MAY 1977
	070 01	YIAU-MIN HUANG
00001680	030 01	11
	120 01	VALLEY
	160 01	ALONG ROAD
	170 01	PLANTATION; SUGARCANE; DISTANCE FROM NEAREST HOME 100-999 M
	200 01	SMALL
	205 01	GROUND POOL

PAGE NO: 4

TRINKAE COLLECTED ABOVE 250 M IN ECUADOR  
MASTER LIST

DATE: 02/07/80

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00001680	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	275	01	SUBMERGED; EMERGENT
	285	01	GREEN; BROWN
	290	01	SCARCE
	500	01	TWO WHOLE MOUNTED ADULTS INCLUDED IN MR 4.
00001690	600	01	MR
	605	01	1 AN. (NYS.) TRINKAE
	610	01	002 001 001 *** *** ***
	640	01	M. E. FARAN
000028J0	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	16 KM NE
	050	01	001000
	055	01	07 MAY 1977
	070	01	YIAU-MIN HUANG
00002840	090	01	15
	120	01	VALLEY
	136	01	SCRUB
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	235	01	COLOR
	250	01	FRESH
	275	01	SUBMERGED; EMERGENT
	285	01	GREEN; BROWN
	290	01	SCARCE
	500	01	IR 100a AND b ENTERED AS MR 1.
00002846	600	01	MR
	605	01	2 AN. (NYS.) TRINKAE
000028J0	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	16 KM NE
	050	01	001000
	055	01	07 MAY 1977
	070	01	YIAU-MIN HUANG

DATE: 02/07/80

PAGE NO: 5

TRINKAE COLLECTED ABOVE 250 M IN ECUADOR  
MASTER LIST

.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....

SERIAL CATEG LINE

00002950	090 01	16
	120 01	VALLEY
	165 01	STREAM
	170 01	DISTANCE FROM NEAREST HOME 100-999 M
	200 01	SMALL
	205 01	GROUND POOL
	210 01	FULL SUN
	220 01	TEMPORARY
	225 01	STAGNANT
	230 01	TURBID; MUDDY
	250 01	FRESH
	270 01	SCARCE
	500 01	IR 105 WITH BROKEN VIAL FOR P.
00002956	600 01	MR
	605 01	2 AN. (NYS.) TRINKAE
00003250	005 01	ECU
	010 01	ECUADOR
	015 01	PASTAZA
	025 01	PUYO
	045 01	01 28 --S. 077 59 --W
	050 01	000953
	055 01	08 MAY 1977
	070 01	YIAU-MIN HUANG
00003260	090 01	17
	120 01	VALLEY
	136 01	SCRUB
	170 01	DISTANCE FROM NEAREST HOME 100-999 M
	200 01	SMALL; LONG
	205 01	GROUND POOL; WHEEL TRACK
	210 01	FULL SUN
	220 01	TEMPORARY
	225 01	STAGNANT
	230 01	CLEAR
	250 01	FRESH
	275 01	SUBMERGED; EMERGENT
00003271	600 01	MR
	605 01	2 AN. (NYS.) TRINKAE
00003250	005 01	ECU
	010 01	ECUADOR
	015 01	PASTAZA
	025 01	PUYO
	045 01	01 28 --S. 077 59 --W
	050 01	000953
	055 01	08 MAY 1977
	070 01	YIAU-MIN HUANG

DATE: 02/07/80

TRINKAE COLLECTED ABOVE 250 M IN ECUADOR  
MASTER LIST

PAGE NO: 6

SERIAL CATEG LINE .....2....V....3....V....4....V....5....V....6....V....7....V....

00003770	090	01	18	VALLEY
	120	01		ALONG ROAD
	160	01		STREAM
	165	01		DISTANCE FROM NEAREST HOME 100-999 M
	170	01		LARGE
	200	01		GROUND POOL; POND-LIKE
	205	01		FULL SUN
	210	01		TEMPORARY
	220	01		STAGNANT
	225	01		COLOR
	235	01		FRESH
	250	01		SUBMERGED; EMERGENT
	275	01		GREEN
	285	01		
00003801	600	01		MR
	605	01		4 AN. (NYS.) TRINKAE
00004940	005	01		ECU
	010	01		ECUADOR
	015	01		PASTAZA
	025	01		PUYO
	030	01		31 KM W
	050	01		002500
	055	01		09 MAY 1977
	070	01		YIAU-MIN HUANG
00004950	090	01	20	ALONG ROAD
	160	01		SMALL
	200	01		DITCH
	205	01		TEMPORARY
	220	01		STAGNANT
	225	01		CLEAR
	230	01		FRESH
	250	01		SCARCE
	270	01		SUBMERGED; EMERGENT
	275	01		CHARLOTTE COULD NOT FIND SLIDES FOR MR 1.
	500	01		
00004960	600	01		MR
	605	01		1 AN. (NYS.) TRINKAE
	610	01		003 *** *** *** *** *** ***
	640	01		M. E. FARAN
00005180	005	01		ECU
	010	01		ECUADOR
	015	01		PASTAZA
	025	01		PUYO
	030	01		12 KM W
	050	01		001250
	055	01		09 MAY 1977

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TRINKAE COLLECTED ABOVE 250 M IN ECUADOR  
MASTER LIST

DATE: 02/07/80

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00005180	070	01	YIAU-MIN HUANG
00005190	090	01	23
	120	01	VALLEY
	165	01	STREAM
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	LARGE
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	ABUNDANT
	275	01	SUBMERGED; EMERGENT
00005196	600	01	MR
	605	01	2 AN. (NYS.) TRINKAE
00006210	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	1.5 KM S
	050	01	000891
	055	01	15 MAY 1977
	070	01	YIAU-MIN HUANG
00006220	090	01	29
	120	01	VALLEY
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	LARGE
	205	01	GROUND POOL
	220	01	TEMPORARY
	225	01	STAGNANT
	235	01	SLIGHTLY
	250	01	FRESH
	270	01	ABUNDANT
	275	01	SUBMERGED; EMERGENT
00006227	600	01	MR
	605	01	3 AN. (NYS.) TRINKAE
00006210	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	1.5 KM S
	050	01	000891
	055	01	15 MAY 1977
	070	01	YIAU-MIN HUANG

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TRINKAE COLLECTED ABOVE 250 M IN ECUADOR  
MASTER LIST

DATE: 02/07/80

SERIAL CATEG LINE .....2....V.....3....V.....4....V.....5....V.....6....V.....7.....V.....

00006530	C90	01	30	VALLEY
	120	01		DISTANCE FROM NEAREST HOME 100-999 M
	170	01		LARGE
	200	01		GROUND POOL; POND-LIKE GROUND POOL
	205	01		TEMPORARY
	220	01		STAGNANT
	225	01		SLIGHTLY
	235	01		FRESH
	250	01		ABUNDANT
	270	01		SUBMERGED; EMERGENT
	275	01		
30006540	600	01		MR
	605	01		1 AN. (NYS.) TRINKAE
	610	01		001 *** *** *** *** ***
	640	01		M. E. FARAN
00006830	005	01		ECU
	010	01		ECUADOR
	015	01		PASTAZA
	025	01		PUYO
	030	01		4.3 KM E
	050	01		001000
	055	01		17 MAY 1977
	070	01		YIAU-MIN HUANG
00006840	090	01	31	VALLEY
	120	01		DISTANCE FROM NEAREST HOME 100-999 M
	170	01		SMALL
	200	01		GROUND POOL
	205	01		FULL SUN
	210	01		TEMPORARY
	220	01		STAGNANT
	225	01		CLEAR
	230	01		FRESH
	250	01		SCARCE
	270	01		SUBMERGED; EMERGENT
	275	01		
00006846	600	01		MR
	605	01		2 AN. (NYS.) TRINKAE
00007150	005	01		ECU
	010	01		ECUADOR
	015	01		PASTAZA
	025	01		PUYO
	030	01		1.5 KM S
	050	01		000891
	055	01		19 MAY 1977
	070	01		YIAU-MIN HUANG

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TRINKAE COLLECTED ABOVE 250 M IN ECUADOR  
MASTER LIST

DATE: 02/07/80

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00007160	090	01	32
	120	01	VALLEY
	136	01	SCRUB
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	MEDIUM
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	PERMANENT
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	ABUNDANT
	275	01	SUBMERGED; EMERGENT
	500	01	IR 107 AND 107 ENTERED IN MR.
00007170	600	01	MR
	605	01	1 AN. (NYS.) TRINKAE
	610	01	012 *** ** 002 002 *** ** *
	630	01	M. E. FARAN
00007150	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	1.5 KM S
	050	01	000891
	055	01	19 MAY 1977
	070	01	YIAU-MIN HUANG
00007440	090	01	33
	120	01	VALLEY
	136	01	SCRUB
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL; LONG
	205	01	GROUND POOL; WHEEL TRACK
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	SCARCE
	275	01	SUBMERGED; EMERGENT
	285	01	GREEN
	500	01	IR 102 DAMAGED.
00007450	600	01	MR
	605	01	1 AN. (NYS.) TRINKAE
	610	01	001 *** ** 002 002 *** ** *
	640	01	M. E. FARAN
00007150	005	01	ECU

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TRINKAE COLLECTED ABOVE 250 M IN ECUADOR  
MASTER LIST

DATE: 02/07/80

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00007150	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	1.5 KM S
	050	01	000891
	055	01	19 MAY 1977
	070	01	YIAU-MIN HUANG
00009320	090	01	34
	120	01	VALLEY
	136	01	SCRUB
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL: LONG
	205	01	GROUND POOL: WHEEL TRACK
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	SCARCE
	275	01	SUBMERGED; EMERGENT
00009328	600	01	MR
	605	01	4 AN. (NYS.) TRINKAE
00013390	005	01	ECU
	010	01	ECUADOR
	015	01	NAPO
	025	01	TENA
	030	01	13 KM SW
	050	01	001000
	055	01	25 MAY 1977
	070	01	YIAU-MIN HUANG
00013870	090	01	43
	120	01	VALLEY
	136	01	SCRUB
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	SMALL: LONG
	205	01	GROUND POOL: WHEEL TRACK
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	SCARCE
	275	01	SUBMERGED; EMERGENT
	285	01	GREEN
00013872	600	01	MR
	605	01	2 AN. (NYS.) TRINKAE



TRINKAE COLLECTED ABOVE 250 M IN ECUADOR

SELGEM MASTER LIST TOTALS:

NUMBER OF LINES PRINTED = 0000454 - NUMBER OF RECORDS PRINTED = 0000057

NUMBER OF LINES PROCESSED = 0000454 - NUMBER OF RECORDS PROCESSED = 0000057

DATE: 02/07/80

TRINKAE WITH RANGELI HABIT LIST  
MASTER LIST

PAGE NO: 1

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....	Has An. (Nys.) trinkae been collected with An. (Nys.) <u>rangeli</u> in Ecuador? In what type of habitat?
00001090	035	01	ECU	
	010	01	ECUADOR	
	015	01	PASTAZA	
	025	01	PUYO	
	030	01	39 KM N	
	050	01	001750	
	055	01	06 MAY 1977	
	070	01	YIAU-MIN HUANG	
00001100	090	01	9	
	120	01	VALLEY	
	136	01	SCRUB	
	160	01	ALONG ROAD	
	170	01	DISTANCE FROM NEAREST HOME 100-999 M	
	200	01	SMALL	
	205	01	POND; LAKE; GROUND POOL	
	210	01	PARTIAL SHADE	
	220	01	TEMPORARY	
	225	01	STAGNANT	
	235	01	COLORADO	
	250	01	FRESH	
	275	01	SUBMERGED; EMERGENT	
	285	01	GREEN	
	500	01	IR 112a ENTERED AS 112.	
00001121	600	01	MR	
	605	01	3 AN. (NYS.) RANGELI	
00001110	600	01	MR	
	605	01	1 AN. (NYS.) TRINKAE	
	610	01	*** 001 001 *** *** *** ***	
	640	01	M. E. FARAN	
00002330	035	01	ECU	
	010	01	ECUADOR	
	015	01	PASTAZA	
	025	01	PUYO	
	030	01	16 KM NE	
	050	01	001000	
	055	01	07 MAY 1977	
	070	01	YIAU-MIN HUANG	
00002840	090	01	15	
	120	01	VALLEY	
	136	01	SCRUB	
	170	01	DISTANCE FROM NEAREST HOME 100-999 M	
	200	01	SMALL	
	230	01	GROUND POOL	
	210	01	FULL SUN	

AD-A111 365

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F/G 6/3

APPLICATION OF A COMPUTERIZED GENERAL PURPOSE INFORMATION MANAG--ETC(U)

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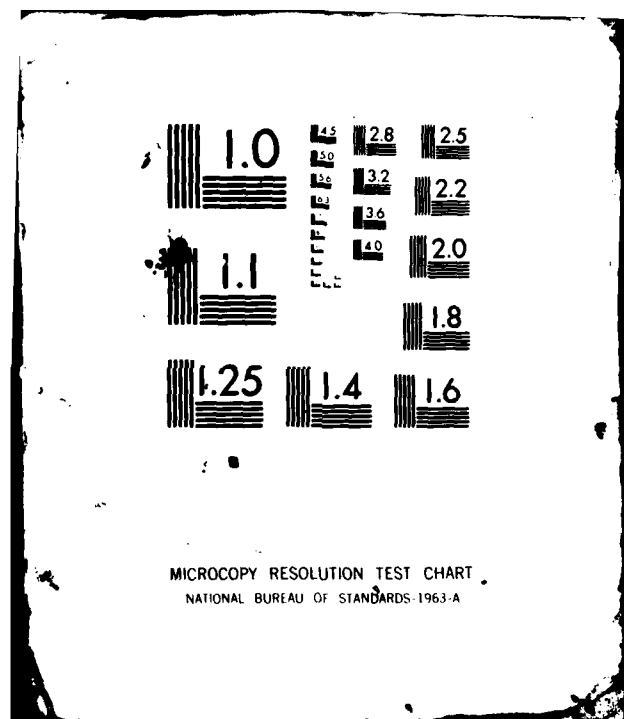
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PAGE NO: 2

TRINKAE WITH RANGELI HABIT LIST  
MASTER LIST

DATE: 02/07/80

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00002840	220	01	TEMPORARY
	225	01	STAGNANT
	235	01	COLORS
	250	01	FRESH
	275	01	SUBMERGED; EMERGENT
	285	01	GREEN; BROWN
	290	01	SCARCE
	500	01	IR 100a AND b ENTERED AS MR 1.
00002847	600	01	MR
	605	01	3 AN. (NYS.) RANGELI
00002846	600	01	MR
	605	01	2 AN. (NYS.) TRINKAE
00007150	005	01	ECU
	010	01	ECUADOR
	015	01	PASTAZA
	025	01	PUYO
	030	01	1.5 KM S
	050	01	000891
	055	01	19 MAY 1977
	070	01	YIAU-MIN HUANG
00007160	090	01	32
	120	01	VALLEY
	136	01	SCRUB
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	MEDIUM
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	PERMANENT
	225	01	STAGNANT
	230	01	CLEAR
	250	01	FRESH
	270	01	ABUNDANT
	275	01	SUBMERGED; EMERGENT
	500	01	IR 107 AND 107 ENTERED IN MR.
00007180	600	01	MR
	605	01	2 AN. (NYS.) RANGELI
	610	01	001 *** *** *** *** *** ***
	640	01	M. E. FARAN
00007190	600	01	MR
	605	01	1 AN. (NYS.) TRINKAE
	610	01	012 *** *** 002 002 *** *** ***
	640	01	M. E. FARAN
00012490	005	01	ECU
	010	01	ECUADOR

DATE: 02/07/80

TRINKAE WITH RANGELI HABIT LIST  
MASTER LIST

PAGE NO: 3

SERIAL	CATEG	LINE	.....2.....V.....3.....V.....4.....V.....5.....V.....6.....V.....7.....V.....
00012490	015	01	HAPO
	025	01	TENA
	030	01	11.7 KM SW
	055	01	25 MAY 1977
	070	01	YIAU-MIN HUANG
00012500	090	01	40
	120	01	VALLEY
	136	01	SCRUB
	160	01	ALONG ROAD
	170	01	DISTANCE FROM NEAREST HOME 100-999 M
	200	01	LARGE
	205	01	GROUND POOL
	210	01	FULL SUN
	220	01	TEMPORARY
	225	01	STAGNANT
	235	01	COLOR
	250	01	FRESH
	270	01	ABUNDANT
	275	01	SUBMERGED; EMERGENT
00012511	600	01	MR
	605	01	2 AN. (NYS.) RANGELI
00012514	600	01	MR
	605	01	5 AN. (NYS.) TRINKAE

## TRINKAE WITH RANGELI HABIT LIST

## SELGEN MASTER LIST TOTALS:

NUMBER OF LINES PRINTED = 0000111 - NUMBER OF RECORDS PRINTED = 0000016

NUMBER OF LINES PROCESSED = 0000111 - NUMBER OF RECORDS PROCESSED = 0000016

How many individually reared and mass reared specimens are there from Ecuador?

#### MOSQUITO ECUADOR FILE SUMMATION

##### a. Individual rearings:

1.) I	267
2.) P	790
3.) M	877
4.) F	941
5.) G	86

##### b. Mass rearings:

1.) L	80
2.) I	25
3.) P	0
4.) P	0
5.) M	18
6.) F	6
7.) E	0
8.) G	0



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